

Dam Safety Act, 2021 National Committee on Dam Safety

Agenda Papers of 1st Meeting

02 August 2022 11:00 – 17:00 hours 209, 2nd Floor Conference Room Central Water Commission, New Delhi

Ministry of Jal Shakti
Government of India
NDSA Secretariat
New Delhi

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National Committee on Dam Safety, Ministry of Jal Shakti, Government of India, New Delhi **Agenda Papers of 1st Meeting** on 2 August 2022

Dam Safety Act, 2021

National Committee on Dam Safety

Ministry of Jal Shakti, Government of India, New Delhi

1st Meeting

02 August 2022

209, 2nd Floor, Conference Room, Central Water Commission, New Delhi

Agenda

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1		Reporting Items
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Dam Safety Act, 2021

National Committee on Dam Safety

1st Meeting

02 August 2022 209, 2nd Floor, Conference Room, CWC, New Delhi

Agenda Items

1.0 WELCOME

1.0.1 | Chairman

The *Chairman* of *National Committee on Dam Safety, Dr R. K.* Gupta, will welcome the Members and make his opening remarks.

1.1.1 Enactment of the *Dam Safety Act,* 2021

The *Dam Safety Act*, 2021 (No. 41 of 2021), has received the assent of the President on the 13 December, 2021. The Act provides for surveillance, inspection, operation and maintenance of the specified dam for prevention of dam failure related disasters and to provide for institutional mechanism to ensure their safe functioning and for matters connected therewith or incidental thereto. In exercise of the powers conferred by **Sub-Section (3)** of **Section 1** of the *Dam Safety Act*, 2021 (hereinafter referred to as the *Act*), the Central Government (vide Gazette Notification No S.O. 5422(E)) has appointed 30 December, 2021 as the date on which the provisions of the said Act shall come into force. A copy of the gazette notification related to the same is presented in **Annexure 1.1** at pages **A3-A24** of these **Agenda Papers**.

This is for information of the members of The National Committee on Dam Safety.

1.1 POLICY MATTERS1.1.2 Constitution of National Committee on Dam Safety

The *National Committee on Dam Safety (NCDS)* was constituted by Central Government vide Ministry of Jal Shakti Gazette notification, S.O. 757 (E) dated 17 February 2022 and appointed 18th February 2022 as the date on which the said committee shall come into force; a copy of the notification related to the same is presented in **Annexure 1.2** at pages **A25-A28** of these **Agenda Papers**. In continuation, the *Ministry of Jal Shakti*, after the due approval of the competent authority, notified:

- (1) The states that will be the *Members of* the *NCDS* by rotation, and
- (2) The two *nominated Members* of NCDS, vide Office Memorandum No. 52022/2/2021-BM dated 6 April 2022.

A copy of the notification related to the same is presented in **Annexure 1.3** at pages **A29-A30** of these **Agenda Papers**.

The *RULES* related to the *National Committee on Dam Safety* were made by the Central Government titled "National Committee on Dam Safety (Procedures, Allowance and other Expenditure) Rules, 2022" and notified by Ministry of Jal Shakti as G.S.R.134(E) in Gazette of India dated 17 February 2022. They shall come into force on the date of their publication in the Official Gazette. A copy of the said notification is presented in Annexure 1.4 at pages A31-A41 of these Agenda Papers.

This is for information of the members of The National Committee on Dam Safety.

1.1.3 Establishment of *National Dam Safety Authority*

The *National Dam Safety Authority (NDSA)* was established by Central Government vide Ministry of Jal Shakti Gazette notification, S.O.758 (E) dated 17 February 2022 and appointed 18 February 2022 as the date on which the said Authority shall come into force; a copy of the notification related to the same is presented in **Annexure 1.2 at pages A25-A28 of these Agenda Papers**. Subsequently, the Ministry of Jal Shakti notified the composition of the NDSA, vide *Office Memorandum* No.52011/2/201-BM/PR dated 25 April 2022; a copy of the said notification related to the same is presented in **Annexure 1.5** at pages **A42- A44** of these **Agenda Papers**.

The *RULES* related to the *National Dam Safety Authority* were made by the Central Government titled "National Dam Safety Authority (Functions and Powers) Rules, 2022" and notified by Ministry of Jal Shakti as G.S.R. 135(E) in Gazette of India dated 17 February, 2022. They shall come into force on the date of their publication in the Official Gazette. A copy of the said notification is presented in Annexure 1.4 at pages A31-A41 of these Agenda Papers.

This is for information of the members of The National Committee on Dam Safety.

1.1 POLICY MATTERS			
1.1.4	Status of Notification of:		
	(a) State Committees on Dam Safety, and		
	(b) State Dam Safety Organizations		

For the purposes of the *Act*, the States Governments are required to constitute and notify the *State Committee on Dam Safety* (SCDS), and establish *State Dam Safety Organisation* (SDSO) within 180 days from the date of commencement of the *Act* (**Sections 11** and **14**), *i.e.*, with effect from 30 December 2021. The status of notification of SCDS and SDSO by the States as received by *NDSA Secretariat* is as follows:

S.No.	State	SCDS created	SDSO created
1	Andhra Pradesh	Yes	Yes
2	Arunachal Pradesh	Yes	Yes
3	Assam	Yes	-
4	Bihar	Yes	Yes
5	Chhattisgarh #	Yes	-
6	Goa	Yes	Yes
7	Gujarat	Yes	Yes
8	Haryana	Yes	Yes
9	Himachal Pradesh	Yes	Yes
10	Jharkhand #	-	-
11	Karnataka	Yes	Yes
12	Kerala#	-	-
13	Madhya Pradesh	Yes	Yes
14	Maharashtra	Yes	Yes
15	Manipur	Yes	Yes
16	Meghalaya	Yes	Yes
17	Mizoram	Yes	Yes
18	Nagaland	Yes	Yes
19	Odisha	Yes	Yes
20	Punjab	Yes	Yes
21	Rajasthan	Yes	Yes
22	Sikkim	-	-
23	Tamil Nadu	Yes	Yes
24	Telangana	Yes	Yes
25	Tripura	Yes	Yes
26	Uttarakhand	Yes	Yes
27	Uttar Pradesh	Yes	Yes
28	West Bengal #	Yes	-
29	A&N Islands (UT)	-	-
30	Jammu and Kashmir (UT)	-	-
31	Ladakh (UT)	-	-

SDSO already existing in the State need to be notified as per the Dam Safety Act, 2021.

The NDSA may take up with the State Governments, which have yet not complied the **Sections 11(2) and 14(1)** of *Dam Safety Act*, 2021, for notifying the SCDS and SDSO in their respective States at the earliest.

The *National Committee on Dam Safety* is requested to *note* the above.

1.1.5 Functions of *National Committee on Dam Safety*

The functions of *National Committee on Dam Safety* have been enlisted in the *First Schedule* of *Dam Safety Act*, 2021, which are as follows:

- For the purposes of maintaining standards of dam safety and prevention of dam failure related disasters, evolve dam safety policies and recommend necessary regulations as may be required;
- ii. Act as a forum for exchange of views on techniques to be adopted for remedial measures to relieve distress conditions in specified dams and appurtenant structures;
- iii. Analyse the causes of major dam incidents and dam failures and suggest changes in the planning, specifications, construction, operation and maintenance practices in order to avoid recurrence of such incidents and failures;
- iv. Evolve comprehensive dam safety management approach as an integration of dam safety evaluation, risk assessment and risk management for the desired level of safety assurance; and also explore compensations, by means of insurance coverage for the people affected by dam failures;
- v. Render advice on any specific matter relating to dam safety which may be referred to it by the Central Government or the State Government, as the case may be;
- vi. Make recommendations on a request by the Central Government on safety measures in respect of dams located outside the territory of India;
- vii. Make recommendations on the rehabilitation requirements of ageing dams;
- viii. Provide strategic supervision for such dam rehabilitation programmes that are executed in States through central or externally aided funding;
- ix. Identify areas of research and development for dam safety and recommend for provision of funds;
- x. Make recommendations on the coordinated reservoir operations of cascading dams; and
- xi. Any other specific matter relating to dam safety which may be referred to it by the Central Government.

The *National Committee on Dam Safety* is requested to *note* the above.

1.1.6 Formulation of RULES and REGULATIONS under Section **54** of Dam Safety Act, 2021

As per Sub-Section (1) of *Section 54*, the Authority on the recommendations of the *National Committee* may make regulations consistent with this Act and the rules made there under to carry out the provisions of this Act. As per Section 55 of the Act "Every rule and every regulation made by the Central Government under this Act shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the rule or regulation or both Houses agree that the rule or regulation should not be made, the rule or regulation shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule or regulation."

A Sub-Committee with the approval of *Chairman*, *National Committee on Dam Safety*, has been constituted, under the *Chairmanship* of *Member (Policy & Research)*, *NDSA*, to draft *RULES and REGULATIONS* on the subject matters. The Committee shall submit the draft regulations and rules to the *National Committee on Dam Safety (NCDS)* for consideration. A copy of the constitution of Sub-Committee is placed as **Annexure-1.6** at **page A45** of these **Agenda Papers**.

It is proposed that the NDSA shall submit the draft *RULES* and *REGULATIONS* to NCDS at the earliest.

The *National Committee on Dam Safety* is requested to:

- (1) *Ratify* the approval accorded by the Chairman of NCDS on the formation of the Sub-Committee related to formulation of draft *RULES* and *REGULATIONS*, and
- (2) *Consider and approve* the above proposal.

1.1.7 Dissolution of ALL National Committees related to Dam Safety and other Inter-State Sub-Committees constituted prior to enactment of the Dam Safety Act, 2021

The following *National Committees* and *Sub-Committees* existed prior to the enactment of the *Dam Safety Act*, 2021:

- (1) National Committees:
 - (a) National Committee on Dam Safety,
- (2) *Sub-Committees* to monitor the safety aspects of *Inter-State dams*:
 - (a) Mahanadi River System Sub-Committee,
 - (b) Subarnarekha River System Sub-Committee, and
 - (c) Parambikulam Aliya Project System.

As per the provisions of the *Dam Safety Act*, 2021, following have been entrusted with the functions related to *Dam Safety*:

- (1) National Committee on Dam Safety,
- (2) National Dam Safety Authority,
- (3) State Committees on Dam Safety, and
- (4) State Dam Safety Organizations.

In view of the above, it is proposed to dissolve *all existing National Committees related to Dam Safety* and other *Inter-State Sub-Committees*.

1.2 DAM SAFETY

1.2.1 Technical Documentation – *National Registry of Specified Dams*

As per *Dam Safety Act*, 2021, every dam owner shall maintain *Technical Documents* in accordance with the Section 22 of the Act:

- (1) Every owner of the specified dam shall compile all technical documentations concerning hydrology, dam foundation, structural engineering of dam, watershed upstream of dam, and nature or use of land downstream of dam along with information on all resources or facilities of economic, logistic or environmental importance which are likely to be affected due to dam failure.
- (2) Every owner of the specified dam shall furnish all such information to the State Dam Safety Organisation and the Authority as and when required by them.
- (3) Every owner of the specified dam shall equip its organisation with the state-of-theart information technology tools to store, retrieve, and distribute the data related to the dam safety and dam performance.

The work of comprehensive assessment of the dam safety of the existing Specified Dams in India requires a strong database. An inventory of the salient features, existing protocols pertaining to each specified dam along with following details is required to be created:

- (a) Salient Features,
- (b) Design details along with various investigation data,
- (c) *Instrumentation details*,
- (d) Inspection reports,
- (e) Alterations/maintenance works carried out at Dam & appurtenant structures,
- (f) Operation and Maintenance Manual,
- (g) Emergency Action Plan, and
- (h) Record of Dam Failures and Distresses.

In view of the above, it is proposed that All *State Dam Safety Organizations* shall prepare and submit through State Committee on Dam Safety to NDSA, all of the documents for each of the *SPECIFIED DAMS* under their jurisdiction:

- (1) A detailed *list of all specified dams*, along with all salient information of the said dams, sought as per **Annexure 1.7** at pages **A46-A47** of these **Agenda Papers**; and
- (2) A detailed record of all failures and distresses of the said dams, if any.

The details pertaining to dams as finalised by SCDS need to be entered and updated in the *DHARMA* (*Dam Health and Rehabilitation Monitoring Application*) tool created by CWC, which is web-based application for maintaining the database of all specified dams. Initially NDSA may fill-up these details in DHARMA and shall make the tool operational. For this purpose, NDSA shall engage, if required, a consultant/agency for updation and maintenance of the DHARMA. Also, NDSA may facilitate the States, UTs and CPSUs to update the data pertaining to the dams under their jurisdiction. Once the system is in place, the SCDS shall ensure that all the owners of the dams are entering the data regularly in DHARMA.

1.2 DAM SAFETY

1.2.2 | Comprehensive Dam Safety Evaluation Procedures

The Dam Safety Act, 2021, in Sections 38, 39 and 40, requires Comprehensive Dam Safety Evaluation of each specified dam, to be carried out through an Independent Panel of Experts:

(1) Section 38 (1)

The Owner of the Specified Dam shall arrange to undertake Comprehensive Evaluation of Dam Safety, such that:

- (a) The Comprehensive Evaluation of Dam Safety shall include, but not be limited to:
 - (i) Review and analyse of available data on the design, construction, operation, maintenance and performance of the dam structure;
 - (ii) Assess hydrologic and hydraulic conditions with mandatory review of design floods as specified by the *Regulations*;
 - (iii) Assess earthquake safety of the dam with mandatory site-specific earthquake parameters study in certain cases as specified by the Regulations;
 - (iv) Evaluate the operation, maintenance and inspection procedures; and
 - (v) Evaluate any other conditions which constitute a hazard that jeopardizes the integrity of the structure.
- (b) The method of *comprehensive evaluation of dam safety* shall be as specified by the *Regulations* laid down for this purpose;
- (c) The Comprehensive Evaluation of Dam Safety shall be conducted by a duly constituted Independent Panel of Experts; the experts shall be finalised in consultation with NDSA; and
- (d) The first comprehensive evaluation of the safety of the dam **shall be conducted within five years** from the date of notification of this Act, and the subsequent comprehensive evaluations shall be carried out at intervals as specified by the *Regulations* laid down for this purpose.

(2) **Section 39**

The *Comprehensive Evaluation of Dam Safety* shall compulsorily examine:

- (a) The need for major modification to the original structure or design criteria;
- (b) Identify an unusual condition at the dam or reservoir rim; and
- (c) The possibility of an extreme hydrological or earthquake event.

(3) **Section 40 (1)**

The *Owner of the Specified Dam* shall:

- (a) Report to the **respective Dam Safety Organisation** the results of the *Comprehensive Evaluation of Dam Safety* undertaken as per **Sections 38** and **39**; and
- (b) Ensure that the said report includes, but not is limited to:
 - (i) Assessment of the condition of the structure based on the visual observations and available data on the design, hydrology, construction, operation, maintenance and performance of the structure;
 - (ii) Recommend, if required:
 - (1) *Emergency measures or actions* to improve structural safety of the dam;
 - (2) Remedial measures and actions related to design, construction, operation, maintenance and inspection of the dam structure;

- (3) Detailed studies, investigations and analyses to reduce uncertainties, and
- (4) *Improvements* in routine maintenance and inspection of dam.
- (c) Ensure that the said report includes, but not is limited to:

The *respective Dam Safety Organisation* shall pursue with the *Owner of the Specified Dam* to ensure that:

- (i) Remedial measures are carried out in time, and
- (ii) Adequate funds are provided on priority.
- (4) Where there is an unresolved matter emerging out of discussions between the *Independent Panel of Experts* (referred to in Section 38 (1)) and the *Owner of the Specified Dam*, the matter shall be referred to the *State Dam Safety Organisation*. And, even then if no agreement is arrived at, the matter shall be referred further to the *National Dam Safety Authority*, which shall render its advice, and send recommendations to the *State Government* concerned for implementation. And, it is binding on the *Owner of the Dam* to comply with the above.

In view of the above, it is proposed that the following be undertaken: "The SCDS through SDSO shall prepare and submit to the *NDSA* a detailed road map, mentioning the proposed experts, organisations, institutes, agencies etc which shall be engaged by them for carrying out the *Comprehensive Evaluation of Dams in their jurisdiction*, addressing all matters involved therein, including but not limited to:

- (1) Hydraulic & Hydrological Safety,
- (2) Structural Safety,
- (3) Geotechnical Safety, and Reservoir Rim Stability,
- (4) Reservoir Siltation Study,
- (5) Safety of Appurtenant Structures,
- (6) Mechanical and Electrical Systems Safety, and
- (7) Dam Break Analysis and Downstream Inundation Mapping.

The said document shall be submitted by *State Dam Safety Organization* to the *State Committee on Dam Safety*, which after due diligence and necessary improvements in the same, will submit the revised document to the *National Dam Safety Authority*.

These reports from the *Owners of the Specified Dams* (submitted by the *State Committees on Dam Safety* to the *NDSA*) shall be tabled at the ensuing meetings of the *National Committee on Dam Safety*, along with an overview of the current status of dam safety in India.

1.2 DAM SAFETY

1.2.3 Emergency Action Plan and Disaster Management Initiatives

Based on the *Dam Break Analysis*, Dam Owners shall prepare an *Emergency Action Plan* for each dam after due consultation with all stakeholders.

- (1) As per **Section 36(1)**, every owner of the dam shall:
 - (a) Prepare *Emergency Action Plan* before allowing the initial filling of the reservoir and thereafter update such plans at regular intervals; and
 - (b) in respect of the dam which is constructed and filled before the commencement of this Act, prepare *Emergency Action Plan* within five years from the date of commencement of this Act and thereafter update such plans at regular intervals as may be specified by the regulations.
- (2) The *Emergency Action Plan* shall:
 - (a) Lay down the procedures to be followed for the protection of persons and property upstream or downstream of the specified dam in the event of an actual or imminent dam failure or to mitigate the effects of the disaster;
 - (b) Include therein:
 - i. the type of emergencies, which are likely to occur in the operation of any reservoir;
 - ii. identification of the likely catastrophic flood in the event of any dam failure, along with probable areas, population, structures and installations likely to be adversely affected due to flood water released from the reservoir;
 - iii. warning procedures, inundation maps and advance preparations for handling efficiently and in the best possible manner the likely adverse situations especially to avoid loss of human life;
 - iv. such other matters which may having regard to the geographical conditions, size of the dam and other relevant factors as may be necessary.
- (3) The *Emergency Action Plan* shall be put into action as and when conditions arise which are hazardous or likely to be hazardous to a specified dam or potentially hazardous to public safety, infrastructure, other property or to the environment.
- (4) Every owner of the specified dam shall, while preparing and updating the emergency action plan, undertake a consultation process with all disaster management agencies and other Departments of the State entrusted with disaster management and relief in the area likely to be affected and owners of other dams in the immediate vicinity likely to be affected, so as to bring coordination and transparency and allay any unwarranted fear on dam safety issues.

In view of the above, it is proposed to implement the said **Section** of the *Act*.

1.2 DAM SAFETY

1.2.4 Operation and Maintenance

As per **Section 28** of the *Dam Safety Act*, 2021:

- (1) Every owner of the specified dam shall provide operation and maintenance establishment for the specified dam, and shall ensure that sufficient number of trained operation and maintenance engineers or technical persons is posted at each such dam.
- (2) Every owner of the specified dam shall ensure that a well-documented *Operation & Maintenance (O&M) Manual* is kept at each of the specified dams and are followed at all times. O&M Manual shall include reservoir operation rule curves.

In view of the above, it is proposed to implement the said **Section** of the *Act*.

1.3 CONCERNS ON SPECIFIC DAMS

1.3.1 Reports of Safety related to specific dams submitted by State Committees on Dam Safety

The *Dam Safety Act*, 2021 recognises that two different dams across the country may be observed to show similar distress. It is possible that the *National Committee on Dam Safety* may be able to identify this and provide guidance to the dam owners. Also, it is possible sometimes that the *State Committees on Dam Safety* may need some input from the *National Committee on Dam Safety* on some matter that is unresolved at their end. In turn, the *National Committee on Dam Safety* could discuss the same and provide guidance.

In view of the above, it is proposed that the *State Committees on Dam Safety* shall send their observations of serious nature along with pointed questions related to specific dams, to the *National Committee on Dam Safety*.

1.4 SA	1.4 SAFETY INSPECTION AND DATA COLLECTION		
1.4.1	Establishment of Dam Safety Unit		
1.4.2	Pre- and Post-Monsoon Inspection of Dams		
1.4.3	Instrumentation of Dams, establishment of hydro-meteorological Station &		
	Installation of seismological stations		

(1) Establishment of Dam Safety Unit

Section 30 of the *Act* specifies that "for each specified dam, the owner shall, within the operation and maintenance establishment, provide a dam safety unit consisting of such competent levels of engineers as may be specified by the regulations"

(2) Pre- and Post-Monsoon Inspection of Dams

Section 31 (1) specifies that "Every owner of a specified dam shall undertake every year, through their dam safety unit, a pre-monsoon and post-monsoon inspections in respect of each such dam"

- (a) Without prejudice to **sub-section** (1), every owner of a specified dam shall inspect or cause to be inspected every specified dam by the dam safety unit, during and after every flood, earthquake or any other natural or man-made calamities, or if any sign of distress or unusual behaviour is noticed in the dam.
- (b) Every owner of a specified dam shall:
 - (i) Carry out all inspections referred to in sub-section (1) and sub-section (2) in accordance with the guidelines and check-lists as may be specified by the regulations;
 - (ii) Station, at each of the specified dam site throughout the monsoon period, such engineers and other technical personnel, as may be decided, in consultation with the State Dam Safety Organisation:

Provided that the engineers and other technical personnel shall be required to be stationed at their respective dam sites during entire period of emergency following any other natural or man-made calamity that may create distress conditions in the dam; and

(iii) Forward the inspection report by the dam safety unit to the State Dam Safety Organisation, which shall analyse the report and submit comments on the deficiency and remedial measures, if any, to the owner of the specified dam.

(3) Instrumentation of Dams, establishment of hydro-meteorological Station and Installation of seismological stations

According to **Section 32(1)**, every owner of a specified dam shall have a minimum number of such instruments at each specified dam, and installed in such manner as may be specified by the regulations for monitoring the performance of such dam.

(a) Every owner of the specified dam shall maintain a record of readings of the instrumentations referred to in sub-section (1) and forward the analysis of such readings to the State Dam Safety Organisation, in the form, manner and at such interval as may be specified by the regulations. Further, as per the Act, Seismic Instrument station shall be installed in accordance with the **Section 34** and **Section 38 (2)(c)** of the Act.

- (b) According to **Section 33** (1), every owner of a specified dam shall:
 - (i) Establish a hydro-meteorological station in the vicinity of each specified dam capable of recording such data as may be specified by the regulations; and
 - (ii) Collect, compile process and store data referred to in sub-section (1) at a suitable location
- (c) According to **Section 34 (1)**, in the case of every specified dam, having a height of 30 metres or above or falling under such seismic zone, as may be specified by the regulations, the owner of the specified dam shall:
 - (i) Establish a seismological station in the vicinity of each such dam for recording micro and strong motion earthquakes and such other data as may be specified by the regulations; and
 - (ii) Collect, compile process and store data referred to in sub-section (1) at such suitable location and in such manner as may be specified by the regulations.

In view of the above, it is proposed that the *State Committees on Dam Safety, State Dam Safety Organisations*, and Dam Owners shall take appropriate action to comply with the said provision of the *Act*.

1.5 SUB-COMMITTEES

1.5.1 Formation of Sub-Committees

The Dam Safety Act, 2021 in Section 6(2), has provided for the constitution of *Sub-Committees* under the *National Committee on Dam Safety (NCDS)*, to assist it in the discharge of its functions. Also, the Act has provided in Schedule 2 for secretarial assistance to be provided to these Sub-Committees by the *National Dam Safety Authority*.

The spectrum of issues involved in ensuring Dam Safety is vast and technical. Thus, it is prudent to constitute national level technical think tanks to:

- (1) Identify the issues & needs, discuss contentious issues in light of the state-of-the-art, steer activities (including R&D studies), and facilitate the implementation of dam safety initiatives in their domain areas;
- (2) Provide valuable inputs for the *NCDS* to take evidence-based decisions on the technical matters; and
- (3) Address all technical aspects that lead towards ensuring dam safety of about 5,334 existing specified dams (as registered in *National Register of Large Dams*, 2019).

The proposed *Sub-Committees* under the *NCDS* will be charged to:

- (1) Deliberate on the subject of dam safety and guide the *NCDS* on possible policies to be taken forward for the dam safety in India;
- (2) Build collaborations with similar bodies worldwide to adapt and establish relevant international good practices in India; and
- (3) Prepare and finalize the *guidelines* on the subject matter based on the state-of-the-art technology and established national and international practices.

In turn, the NCDS will examine and take decisions based on the considered inputs provided by these **technical** *Sub-Committees*.

In view of the above, it is proposed to constitute **nine** *Sub-Committees* of the *National Committee on Dam Safety* as per the following *Terms of Reference*:

(1) Thematic Areas

The **nine** *Sub-Committees* of the *National Committee on Dam Safety* shall address the following aspects of *Dam Safety*:

S.No.	Sub-Committee on	Domain Areas of the Sub-Committee	
		(but not limited to)	
1	Dam Safety	Dam Break Analysis	
	Management	Downstream Inundation	
		Risk Classification	
		Disaster Management Actions	
		Dam Safety Management Approach	
2	Hydraulic Safety	Upstream Precipitation	
		Water Catchments	
		Overtopping of Dams	
3	Hydrological Safety	Reservoir Capacity	
		Silting mechanisms and profiles	
		De-silting need and techniques	

4	Structural	Seismic Hazard Assessment
	Engineering and	Structural Analysis
	Earthquake Safety	Structural Design
		Structural Vulnerability
		Structural Risk Assessment
		Structural Safety Evaluation
		Earthquake Instrumentation
		To the state of th
		Continued Operations of:
		(a) Appurtenant Structures, and
		(b) Penstocks and Outlets
5	Geological,	Dam Foundation
	Geophysical and	Reservoir Rim Stability
	Geotechnical Safety	
6	Hydro-Mechanical and	Locking of Gates
	Electrical Systems	Spillways and Energy Dissipaters
	Safety	Outlets
		Water Level Monitoring
		Hydro-power Generation
		Grid Failure
		Flooding of Power Stations
7	Monitoring and	Sensors: Monitoring of Dams
	Instrumentation	Technical Software: GIS, Flood Routing, Dam Break
		Analysis, Seismic Structural Analysis, etc.
		Telemetry: Wireless & Wired Systems, Computer
		Sensors, etc.
8	R&D and Standards	Scrutiny of R&D Proposals on specific domains
	Development	received for funding from Industry, academia &
		research organizations
		Research through Doctoral Programs
9	Capacity Development	Human Resource Requirement
		Resource Persons & Master Trainers
		Resource Materials
		Model Curriculum for degree programs
		Training of Engineers in different subjects
		(Post-Graduate Diploma Programs in Dam Safety;
		1-day Sensitization Programs on specific themes)

Further, each *Sub-Committee* of the *National Committee on Dam Safety* shall examine the *Technical Questions* received on *Specific Dams* and provide considered inputs to the *National Committee on Dam Safety*.

(2) Composition

The *Sub-Committees* 1-7 shall comprise the following:

S.No.	Status	Background	
1	Chairman	Technical Member of National Committee on Dam Safety	
		Or Member of National Committee on Dam Safety from	
		CWC	
2	Vice Chairman	Subject Specialist with 25 years experience	
		in the Domain of the <i>Sub-Committee</i>	
3	Member	Subject Specialist with 25 years experience, from <i>Industry</i>	
4	Member	Subject Specialist with 25 years experience, from <i>R&D</i>	
5	Member	Subject Specialist with 25 years experience, from Academia	
6	Secretary	Nominated by the National Dam Safety Authority	

The *Sub-Committees 8-9* shall comprise the following:

S.No.	Status	Background
1	Chairman	One Chairman of the Sub-Committees 1-7
2	Vice Chairman	Remaining Chairman of the Sub-Committees 1-7
3	Member	Subject Specialist with 25 years experience, from <i>Industry</i>
4	Member	Subject Specialist with 25 years experience, from $R&D$
5	Member	Subject Specialist with 25 years experience, from Academia
6	Secretary	Nominated by the National Dam Safety Authority

Also, all *Sub-Committees* will be supported by a *Secretary* nominated by the *National Dam Safety Authority*.

(3) The *Term of Office* of the *Sub-Committee* shall be Committee-specific and shall be finalized at the time of its constitution.

(4) Meetings of Sub-Committee

The *Sub-Committee* shall meet as many times as required to address the residual agenda of dam safety of India, but not less than once *each quarter* in a calendar year.

1.6 ANY OTHER AGENDA WITH THE PERMISSION OF THE CHAIR

The following matters will be taken up for discussion under this *Agenda Item*:

- (1) A matter proposed by a *Member* of *NCDS* to the *Chairman* of *NCDS* **before** the start of the meeting and **agreed** to the proposal by the Chairman. In such cases, the *Member* proposing the *agenda item* for discussion shall provide *detailed background paper* (in hard copy) on the subject and make a crisp presentation on the same to apprise the *NCDS* of the *need* and/or *urgency* of the *agenda item*; and
- (2) A matter that the *Chairman* wishes to discuss.

. . .



National Committee on Dam Safety

Annexures to Agenda Items of 1st Meeting

2 August 2022 11:00 – 17:00 hours 2nd Floor Conference Room Central Water Commission, New Delhi

Ministry of Jal Shakti

Government of India NDSA Secretariat New Delhi

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National Committee on Dam Safety, Ministry of Jal Shakti, Government of India, New Delhi **Annexures to Agenda Papers of 1st Meeting** on 2 August 2022

Agenda Item 1.1.1 Enactment of Dam Safety Act, 2021

Annexure 1.1

The Dam Safety Act, 2021

रजिस्ट्री सं॰ डी॰ एल॰—(एन)04/0007/2003—21

REGISTERED NO. DL—(N)04/0007/2003—21



सी.जी.-डी.एल.-अ.-14122021-231858 CG-DL-E-14122021-231858

असाधारण

EXTRAORDINARY

भाग II — खण्ड 1

PART II - Section 1

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं॰ 58] नई दिल्ली, मंगलवार, दिसम्बर 14, 2021/ अग्रहायण 23, 1943 (शक) No. 58] NEW DELHI, TUESDAY, DECEMBER 14, 2021/AGRAHAYANA 23, 1943 (SAKA)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके। Separate paging is given to this Part in order that it may be filed as a separate compilation.

MINISTRY OF LAW AND JUSTICE

(Legislative Department)

New Delhi, the 14th December, 2021/Agrahayana 23, 1943 (Saka)

The following Act of Parliament received the assent of the President on the 13th December, 2021, and is hereby published for general information:—

THE DAM SAFETY ACT, 2021

No. 41 of 2021

[13th December, 2021.]

An Act to provide for surveillance, inspection, operation and maintenance of the specified dam for prevention of dam failure related disasters and to provide for institutional mechanism to ensure their safe functioning and for matters connected therewith or incidental thereto.

Be it enacted by Parliament in the Seventy-second Year of the Republic of India as follows:—

CHAPTER I

PRELIMINARY

- 1. (1) This Act may be called the Dam Safety Act, 2021.
- (2) It extends to the whole of India.
- (3) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.
- 2. It is hereby declared that it is expedient in the public interest that the Union should take under its control the regulation of uniform dam safety procedure for specified dam to the extent hereinafter provided.

Short title, extent and commencement.

Declaration as to expediency of Union control.

PART II—

Application.

2

- 3. Save as provided under this Act, it applies to the owner of every specified dam,—
- (a) being a public sector undertaking or institution or a body owned or controlled by the Central Government or a State Government or jointly by one or more Governments, as the case may be; and
- (b) being an undertaking or company or institution or a body other than those owned or controlled by the State Government or the Central Government, as the case may be.

Definitions.

- 4. In this Act, unless the context otherwise requires,—
- (a) "alteration of dam" means alterations or repairs as may directly affect the safety of the dam or reservoir;
- (b) "annual report" means a report giving the activities of the Authority and the State Dam Safety Organisation and the safety status of the specified dams falling under their jurisdiction during each financial year;
 - (c) "appurtenant structure" means the structure being-
 - (i) spillways, either in the dam or separate therefrom;
 - (ii) low level outlet structure and water conduits such as tunnels, pipelines or penstocks, either through the dam or its abutments or reservoir rim;
 - (iii) hydro-mechanical equipment including gate, valve, hoist, elevators;
 - (iv) energy dissipation and river training structure; and
 - (v) other associated structures acting integrally with the dam or its reservoir or reservoir rim;
- (d) "Authority" means the National Dam Safety Authority established under section 8;
- (e) "dam" means any artificial barrier and its appurtenant structure constructed across rivers or tributaries thereof with a view to impound or divert water which also include barrage, weir and similar water impounding structures but does not include—
 - (a) canal, aquaduct, navigation channel and similar water conveyance structures;
 - (b) flood embankment, dike, guide bund and similar flow regulation structures;
- (f) "dam failure" means any failure of the structure or operation of a dam which leads to uncontrolled flow of impounded water resulting in downstream flooding, affecting the life and property of the people and the environment including flora, fauna and riverine ecology.

Explanation.—For the purposes of this clause, failure in the operation shall mean such faulty operations of the dam which are inconsistent with the operation and maintenance manual;

- (g) "dam incident" means all such problems occurring to a dam that have not degraded into a dam failure, and includes—
 - (i) any structural damage to the dam and the appurtenant structure;
 - (ii) any unusual reading of any instrument in the dam;
 - (iii) any unusual seepage or leakage through the dam body;
 - (iv) any unusual change in the seepage or leakage regime;
 - (v) any boiling or artesian condition noticed below the dam;

- (vi) any sudden stoppage or unusual reduction in seepage or leakage from the foundation or body of the dam or any of its galleries;
 - (vii) any malfunction or inappropriate operation of gates;
- (viii) occurrence of flood, the peak of which exceeds the available flood discharge capacity of the dam or seventy per cent. of the approved design flood:
- (ix) occurrence of flood, which resulted in encroachment on the available freeboard, or the approved design freeboard;
- (x) any unusual erosion in the near vicinity up to five hundred metres downstream of the spillway or waste-weir; and
- (xi) any other occurrence which a prudent dam engineer may relate to dam safety concerns;
- (h) "dam safety unit" means a dam safety unit of any specified dam referred to in section 30;
- (i) "distress condition" means the occurrence or potential development of such conditions in the dam or appurtenance structure or its reservoir or reservoir rim, which if left unattended to, may impede the safe operation of dam for its intended benefits or may pose serious risks to the life and property of people and the environment including flora, fauna and riverine ecology;
- (j) "documentation" means all permanent records including electronic records concerning investigation, design, construction, operation, performance, maintenance, major repair, alteration, enlargement and safety of dams and includes design memorandum, construction drawings, geological reports, reports of specialised studies simulating structural and hydraulic response of the dam, changes made in design and drawings, quality control records, emergency action plan, operation and maintenance manual, instrumentation readings, inspection and testing reports, operational reports, and dam safety review reports and other similar reports;
- (k) "enlargement of dam" means any change in the scope of an existing dam or reservoir, which raises water storage elevation or increases the volume of water impounded by the dam;
- (l) "Government" means the Central Government or a State Government, as the case may be;
- (m) "inspection" means on-site examination of any component of a dam and its appurtenant structure;
- (n) "investigation" means collection of evidence, detailed examination, analysis or scrutiny of a specific problem pertaining to the dam and its appurtenant or a part thereof and includes laboratory testing, in-situ testing, geological exploration, model testing and mathematical simulation of the problem;
- (o) "National Committee" means the National Committee on Dam Safety constituted under section 5;
- (p) "notification" means a notification published in the Official Gazette and the term "notify" shall be construed accordingly;
- (q) "operation of dam" means elements of the use, control and functioning of the dam which may primarily affect the storage, release of water and the structural safety of the dam;
- (r) "operation and maintenance manual" means the written instructions that provide operation procedures, maintenance procedures, emergency procedures and any other features necessary for the safe operation of dam;

THE GAZETTE OF INDIA EXTRAORDINARY

- (s) "owner of specified dam" means the Central Government or a State Government or jointly by one or more Governments or public sector undertaking or local authority or company and any or all of such persons or organisations, who own, control, operate, or maintain a specified dam;
- (t) "prescribed" means prescribed by rules made by the Central Government or, as the case may be, by the State Government;
 - (u) "regulations" means the regulations made by the Authority under this Act;
- (v) "remedial measures" means such structural or non-structural measures, as may be required in relation to the specified dam or appurtenant structure or reservoir or reservoir rim or catchment area of reservoir for the purpose of removing or mitigating the distress condition of the specified dam;
- (w) "reservoir" in relation to a dam shall mean any spread of water impounded by a specified dam;
- (x) "specified dam" means a dam constructed before or after the commencement of this Act, which is,—
 - (i) above fifteen metres in height, measured from the lowest portion of the general foundation area to the top of dam; or
 - (ii) between ten metres to fifteen metres in height and satisfies at least one of the following, namely:—
 - (A) the length of crest is not less than five hundred metres; or
 - (B) the capacity of the reservoir formed by the dam is not less than one million cubic metres; or
 - (C) the maximum flood discharge dealt with by the dam is not less than two thousand cubic metres per second; or
 - (D) the dam has specially difficult foundation problems; or
 - (E) the dam is of unusual design;
- (y) "State Committee" means the State Committee on Dam Safety constituted under sub-section (1) of section 11;
- (z) "State Dam Safety Organisation" means the State Dam Safety Organisation established under section 14; and
- (za) "vulnerability and hazard classification" means the system or systems of classifying dams on the basis of their condition, location, damage or hazard potential.

CHAPTER II

NATIONAL COMMITTEE ON DAM SAFETY

Constitution of National Committee.

- 5. (1) With effect from such date as the Central Government may, by notification, appoint, there shall be constituted, for the purposes of this Act, a National Committee to be known as the National Committee on Dam Safety consisting of the following members, namely:—
 - (a) the Chairman, Central Water Commission—Chairperson, ex officio;
 - (b) not exceeding ten representatives of the Central Government not below the
 rank of Joint Secretary to that Government or equivalent dealing with matters relating
 to dam engineering or dam safety, nominated by the Central Government
 —Members, ex officio;
 - (c) not exceeding seven representatives of the State Governments of the level of Engineer-in-Chief or equivalent by rotation, nominated by the Central Government —Members, ex officio; and

- (d) not exceeding three specialists in the field of dam safety and allied fields nominated by the Central Government-Members.
- (2) The National Committee shall be constituted within a period of sixty days from the date of commencement of this Act, and shall be reconstituted for every three years thereafter.
- **6.** (1) The National Committee shall discharge such functions as specified in the First Schedule as may be necessary to prevent dam failure related disasters and to maintain standards of dam safety.

Functions of National Committee.

- (2) The National Committee may, in discharge of its functions, constitute such sub-committees as it may consider necessary to assist it and the secretarial assistance to the National Committee and the sub-committees shall be provided by the Authority.
- (3) The knowledge and information collected or generated by the National Committee shall be disseminated to all stakeholders by the Authority.
- 7. (1) The National Committee shall meet at such times and places and shall observe such rules of procedure in regard to the transaction of business at its meetings in the manner as may be prescribed by the Central Government:

Meetings of National Committee.

Provided that the National Committee shall meet twice in a year and one meeting shall be held before the onset of the monsoon season.

- (2) The National Committee may invite the representative of the owner of any specified dam and such other experts in dam safety (including international experts) as it may consider appropriate for the discharge of its functions.
- (3) The expenditure incurred on the National Committee shall be in such manner as may be prescribed by the Central Government.

CHAPTER III

NATIONAL DAM SAFETY AUTHORITY

8. (1) With effect from such date as the Central Government may by notification, Establishment appoint, there shall be established for the purposes of this Act, a National Dam Safety Authority, within a period of sixty days from the date of commencement of this Act.

of National Dam Safety Authority.

- (2) The Authority shall be headed by an officer not below the rank of Additional Secretary to the Government of India or equivalent to be appointed by the Central Government who have knowledge of, and adequate qualification, experience and capacity in, dealing with problems relating to the dam engineering and dam safety management.
- (3) The headquarters of the Authority shall be at the National Capital territory of Delhi and the Authority may establish offices at other places in India.
- (4) The Authority shall comply with such directions as may, from time to time, be given to it by the Central Government.
- 9. (1) The Authority shall discharge such functions as specified in the Second Functions of Schedule as may be necessary to implement the policy, guidelines and standards evolved by the National Committee for proper surveillance, inspection and maintenance of specified dams and for such purposes, it shall have the power to enforce the attendance of any person and call for any information as may be necessary.

Authority.

- (2) Without prejudice to the provisions contained in sub-section (1), the Authority shall make all endeavours to resolve any issue between the State Dam Safety Organisations of States or between a State Dam Safety Organisation and any owner of a specified dam in that State.
- (3) Every decision of the Authority taken in respect of matters under this Act shall be final and binding upon all the parties to the issue.

6

Officers and Employees of Authority. **10.** (1) The Central Government shall, for the purpose of enabling the Authority to perform functions under this Act, provide such number of officers and other employees as it may consider necessary:

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Provided that the officers and other employees shall have such qualifications and experience in the field of dam safety including dam-design, hydro-mechanical engineering, hydrology, geo-technical investigation, instrumentation, dam-rehabilitation or such other fields as may be prescribed by the Central Government.

(2) The functions, powers, terms and conditions of service of the officers and other employees appointed under sub-section (1) shall be such as may be prescribed by the Central Government.

CHAPTER IV

STATE COMMITTEE ON DAM SAFETY

Constitution of State Committee on Dam Safety.

- 11. (1) With effect from such date as the State Government may, by notification, appoint, there shall be constituted, for the purposes of this Act, a State Committee on Dam Safety consisting of the following members, namely:—
 - (a) the Engineer-in-Chief or equivalent officer of the Department of the State responsible for Dam Safety—Chairperson, ex officio;
 - (b) technical and scientific officers of the rank of Chief Engineer, not exceeding six persons, from such Departments as may be decided by the State Government or from such other organisations owing specified dams—Members;
 - (c) the Chief Engineer or equivalent level officer of each such upstream States in cases where reservoir area of any of the specified dam of the State extends to another State—Members;
 - (d) the Chief Engineer or equivalent level officer of each such downstream State in cases where flood release of any of the specified dam of the State flows to a neighbouring State—Members;
 - (e) one representative of the Central Water Commission not below the rank of Director to be nominated by the Chairman, Central Water Commission—Member;
 - (f) experts in the field of hydrology or dam designs, not exceeding three, from engineering institutes—Members; and
 - (g) one representative of the Central Electricity Authority not below the rank of Director to be nominated by the Chairman, Central Electricity Authority—Member.
- (2) The State Committee shall be constituted within a period of hundred and eighty days from the date of commencement of this Act, and reconstituted for every three years thereafter.

Functions of State Committee.

- 12. (1) The State Committee shall discharge such functions as specified in the Third Schedule as may be necessary to prevent dam failure related disasters under this Act as per guidelines, standards and other directions on dam safety issued by the Authority.
- (2) The State Committee, in discharge of its functions, shall be assisted by such sub-committees as it may consider necessary, and the secretarial assistance to the State Committee as well as its sub-committees shall be provided by the concerned State Dam Safety Organisation.

Meetings of State Committee. 13. (1) The State Committee shall meet at such times and places and shall observe such rules of procedure in regard to the transaction of business at its meetings as may be prescribed by the State Government:

Provided that the State Committee shall meet twice in a year and one meeting shall be held before the onset of the monsoon season.

- (2) The State Committee may invite the representative of the owner of any specified dam and such other experts in Dam Safety as it may consider appropriate, for the discharge of its functions.
- (3) The expenditure incurred on the meetings of the State Committee shall be in the manner as may be prescribed by the State Government.
- (4) The specialist members and other expert invitees who attend the meetings of the State Committee or its sub-committees shall be paid such fees and allowances as may be prescribed by the State Government.

CHAPTER V

STATE DAM SAFETY ORGANISATION

14. (1) The State Government shall, for the purposes of this Act, by notification, establish in the Department dealing with dam safety, a separate organisation, to be known as the State Dam Safety Organisation, within a period of hundred and eighty days from the date of commencement of this Act:

Establishment of State Dam Safety Organisation.

Provided that in States having more than thirty specified dams, the State Dam Safety Organisation shall be headed by an officer not below the rank of Chief Engineer or equivalent, and in all other cases, the State Dam Safety Organisation shall be headed by an officer not below the rank of Superintendent Engineer or equivalent.

- (2) The State Dam Safety Organisation shall be responsible to, and report to, the technical head of the Department dealing with Dam Safety.
- (3) The organisational structure and work procedures of the State Dam Safety Organisation shall be such as may be prescribed by the State Government.
- (4) The administrative and other expenses of the State Dam Safety Organisation shall be borne by the respective State Government.
- 15.(1) The State Government shall, having regard to the number of specified dams in that State, provide such number of officers and employees to the State Dam Safety Organisation as it may consider necessary for the efficient functioning of the said Organisation:

Officers and employees of State Dam Safety Organisation.

Provided that the officers and employees shall have such qualifications and experience in the field of dam safety including dam-design, hydro-mechanical engineering, hydrology, geo-technical investigation, instrumentation, dam-rehabilitation or such other field as may be prescribed by the State Government.

(2) The functions and powers of the officers and employees appointed under sub-section (1) shall be such as may be prescribed by the State Government.

CHAPTER VI

DUTIES AND FUNCTIONS IN RELATION TO DAM SAFETY

16. (1) Every State Dam Safety Organisation shall,—

- (a) keep perpetual surveillance;
- (b) carry out inspections; and
- (c) monitor the operation and maintenance,

of all specified dams falling under their jurisdiction to ensure continued safety of such specified dams and take such measures as may be necessary to address safety concerns that are noticed with a view to achieve satisfactory level of dam safety assurance as per such guidelines, standards and other directions on dam safety as may be specified by the regulations.

(2) The State Dam Safety Organisation, for the purpose of enabling it to make decisions compatible with public safety, shall make or cause to be made such investigations and shall

Surveillance and inspection. gather or cause to be gathered such data as may be required for proper review and study of the various features of the design, construction, repair and enlargement of dams, reservoirs and appurtenant structures under their jurisdiction.

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Vulnerability and hazard classification of dams. 17. The State Dam Safety Organisation shall classify each dam under their jurisdiction as per such vulnerability and hazard classification criteria as may be specified by the regulations.

Maintenance of log books.

- 18.(1) Every State Dam Safety Organisation shall maintain a log book or database for each specified dam under their jurisdiction recording therein all activities related to the surveillance and inspection and all important events related to dam safety and with such details and in such form as may be specified by the regulations.
- (2) Every State Dam Safety Organisation shall furnish all such information to the Authority as and when required by them.

Records of dam failures and dam incidents.

- 19. (1) Every State Dam Safety Organisation shall report the event of any dam failure under their jurisdiction to the Authority, and furnish any information as and when required by them.
- (2) Every State Dam Safety Organisation shall maintain the records of major dam incidents of each specified dams under their jurisdiction, and furnish all such information to the Authority as and when required by them.

Instructions on safety of specified dams.

- **20.** (1) Every State Dam Safety Organisation shall render its instructions to the owner of a specified dam on the safety or the remedial measures required to be taken with respect to it.
- (2) Every owner of the specified dam shall comply with the instructions issued by the State Dam Safety Organisation with regard to safety or remedial measures in relation to any specified dam owned by it.

Funds for maintenance and repairs. 21. Every owner of the specified dam shall earmark sufficient and specific funds for maintenance and repairs of the specified dam and to implement the recommendations of the State Dam Safety Organisation.

Technical documentation.

- **22.** (1) Every owner of the specified dam shall compile all technical documentations concerning hydrology, dam foundation, structural engineering of dam, watershed upstream of dam, and nature or use of land downstream of dam along with information on all resources or facilities of economic, logistic or environmental importance which are likely to be affected due to dam failure.
- (2) Every owner of the specified dam shall furnish all such information to the State Dam Safety Organisation and the Authority as and when required by them.
- (3) Every owner of the specified dam shall equip its organisation with the state-ofthe-art information technology tools to store, retrieve, and distribute the data related to the dam safety and dam performance.

Qualifications and experience of individuals responsible for safety of specified dams. 23. Every individual responsible for safety of specified dams and all activities related thereto shall possess such qualifications and experience and shall undergo such training as may be specified by the regulations.

Jurisdiction of State Dam Safety Organisation and Authority. **24.** (1) Without prejudice to the provisions of this Act, all specified dams, shall fall under the jurisdiction of the State Dam Safety Organisation of the State in which such dam is situated in matters relating to dam inspections, analysis of information, investigation reports or recommendations regarding safety status, and remedial measures to be undertaken

to improve dam safety; and in all such matters, full co-operation shall be extended by the owner of the specified dam:

Provided that where a specified dam is owned by a Central Public Sector Undertaking or where a specified dam is extended over two or more States, or where the specified dam in one State is owned by another State, then the Authority shall be construed as the State Dam Safety Organisation for the purposes of this Act:

Provided further that in all such dams where the Authority takes up the role of State Dam Safety Organisation, the Governments of the States within the jurisdiction of which such dams are located shall have access to all information relating to these specified dams as available with the Authority.

- (2) The authorised representative of the Authority or concerned State Dam Safety Organisation for the purposes of making any inspection or investigation necessary for the implementation of the provisions of this Act, may enter upon any part of the specified dam or its site as and when required and apply such investigation methods, as may be considered necessary.
- (3) After making inspection or investigation under sub-section (2), the representative referred to in that sub-section is of the opinion that certain remedial measures are required to be taken, he shall report such remedial measures to the officer-in-charge of such specified dam and to the concerned State Dam Safety Organisation.
- (4) The Authority and concerned State Dam Safety Organisation, in cases of specified dams being found to be distressed on account of their age, degeneration, degradation, structural or other impediments, shall suggest such remedial measures on such operational parameters (including maximum reservoir level, maximum spillway discharge and maximum discharges through other outlets) as it may consider necessary.
- (5) Nothing contained in sub-sections (1), (2), (3) and (4) shall absolve the owner of specified dam or any other authority or person from any of the responsibilities or obligations entrusted upon it under the provisions of this Act and the provisions of sub-sections (1), (2), (3) and (4) shall be in addition to, and not in derogation of, any other provision of this Act.
- 25. All the costs to be incurred by the Authority or State Dam Safety Organisation on any form of investigation done including payment given to any consultant or expert, shall be borne by the owner of the specified dam.

Cost of investigation.

26. (1) Any construction or alteration of a specified dam shall be undertaken subject to investigation, design and construction being done by such agencies as may be accredited by the Authority or the State Government, as the case may be:

Construction or alteration of dams.

Provided that the Authority may disqualify any agency which violates any of the provisions of this Act or the rules or regulations made thereunder.

- (2) Every agency referred to in sub-section (1) shall, for the purpose of designing or evaluating the safety of the specified dam, make use of the relevant standard codes and guidelines of the Bureau of Indian Standards, and furnish the reasons, if any departure is made in the design or dam safety evaluation.
- (3) Every agency referred to in sub-section (1) shall for the purpose of investigation, design and construction employ such qualified, experienced and competent engineers, as may be specified by the regulations.
- (4) Every agency referred to in sub-section (1) shall for the purpose of approval of dam design demonstrate the safety of the design, operational parameters and policies as per the provisions of relevant codes and guidelines to the Central Government or the State Government, as the case may be.
- (5) Every agency referred to in sub-section (1) shall, for the purpose of dam construction, undertake such quality control measures, as may be specified by the regulations.

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(6) The construction of any specified dam or the alteration or enlargement of any existing specified dam shall be undertaken with the approval of such competent authority, as may be specified by notification by the Central Government or the State Government, as the case may be.

Initial filling of reservoirs.

- 27. (1) Before initial filling of any reservoir of a specified dam, the agency responsible for its design shall draw the filling criteria and prepare an initial filling plan, with adequate time for monitoring and evaluating the performance of the dam and its appurtenant structures.
- (2) Before initial filling of the reservoir is taken up, the State Dam Safety Organisation shall inspect or cause to be inspected the specified dam either through its own engineers or by an independent panel of experts, who shall also examine the initial filling programme and prepare a detailed report thereof duly certifying the fitness of dam for filling.

Operation and maintenance.

- **28.** (1) Every owner of the specified dam shall provide operation and maintenance establishment for the specified dam, and shall ensure that sufficient number of trained operation and maintenance engineers or technical persons are posted at each such dam.
- (2) Every owner of the specified dam shall ensure that a well-documented operation and maintenance manual is kept at each of the specified dams and are followed at all times.

Responsibility of owner of specified dam.

29. Nothing contained in this Act shall be construed to absolve an owner of a specified dam of the duties, obligations or liabilities incidental to the construction, operation, maintenance and supervision of the dam or reservoir.

CHAPTER VII

SAFETY, INSPECTION AND DATA COLLECTION

Dam safety unit.

30. For each specified dam, the owner shall, within the operation and maintenance establishment, provide a dam safety unit consisting of such competent levels of engineers as may be specified by the regulations.

Inspection.

- **31.** (1) Every owner of a specified dam shall undertake every year, through their dam safety unit, a pre-monsoon and post-monsoon inspections in respect of each such dam.
- (2) Without prejudice to sub-section (1), every owner of a specified dam shall inspect or cause to be inspected every specified dam by the dam safety unit, during and after every flood, earthquake or any other natural or man-made calamities, or if any sign of distress or unusual behaviour is noticed in the dam.
 - (3) Every owner of a specified dam shall,—
 - (a) carry out all inspections referred to in sub-section (1) and sub-section (2) in accordance with the guidelines and check-lists as may be specified by the regulations;
 - (b) station, at each of the specified dam site throughout the monsoon period, such engineers and other technical personnel, as may be decided, in consultation with the State Dam Safety Organisation:

Provided that the engineers and other technical personnel shall be required to be stationed at their respective dam sites during entire period of emergency following any other natural or man-made calamity that may create distress conditions in the dam; and

- (c) forward the inspection report by the dam safety unit to the State Dam Safety Organisation, which shall analyse the report and submit comments on the deficiency and remedial measures, if any, to the owner of the specified dam.
- 32. (1) Every owner of a specified dam shall have a minimum number of such Instrumentations instrumentations at each specified dam, and installed in such manner as may be specified by the regulations for monitoring the performance of such dam.

to be installed in every specified dam.

- 11
- (2) Every owner of the specified dam shall maintain a record of readings of the instrumentations referred to in sub-section (1) and forward the analysis of such readings to the State Dam Safety Organisation, in the form, manner and at such interval as may be specified by the regulations.
- 33. (1) Every owner of a specified dam shall establish a hydro-meteorological station in the vicinity of each specified dam capable of recording such data as may be specified by the regulations.

Establishment of hydrometeorological station.

- (2) Every owner of the specified dam shall collect, compile, process and store data referred to in sub-section (1) at a suitable location.
- **34.** (1) In the case of every specified dam, having a height of thirty metres or above or falling under such seismic zone, as may be specified by the regulations, the owner of the specified dam shall establish a seismological station in the vicinity of each such dam for recording micro and strong motion earthquakes and such other data as may be specified by the regulations.

Installations of seismological station.

(2) Every owner of a specified dam shall collect, compile, process and store data referred to in sub-section (1) at such suitable location and in such manner as may be specified by the regulations.

CHAPTER VIII

EMERGENCY ACTION PLAN AND DISASTER MANAGEMENT

- 35. (1) Every owner of a specified dam, in respect of each specified dam, shall,—
- (a) establish well designed hydro-meteorological network and an inflow forecasting system;

Obligation of owner of specified dam.

- (b) establish an emergency flood warning system for the probable flood affected areas downstream of the dam;
- (c) test or cause to be tested periodically the functioning of systems referred to in clauses (a) and (b);
- (d) install such scientific and technical instruments which are invented or adopted from time to time for the purpose of ensuring the dam safety and the life and property of people downstream;
- (e) make available the information relating to maximum anticipated inflows and outflows including flood warning and an adverse impact of the same, if any, on persons and property towards the upstream or downstream of the dam, to the concerned district authorities and also make available the information in public domain; and
- (f) render necessary assistance to the Authority in establishment and running of the early warning system for the exchange of real time hydrological and meteorological data and information related to the operation of reservoirs.
- (2) Every owner of a specified dam, for each of its dam shall, carry out risk assessment studies at such interval as may be specified by the regulations and the first such study shall be made within five years from the date of commencement of this Act.
 - **36.** (1) Every owner of a specified dam, in respect of each of specified dam, shall,—

Emergency action plan.

- (a) prepare emergency action plan before allowing the initial filling of the reservoir and thereafter update such plans at regular intervals;
- (b) in respect of the dam which is constructed and filled before the commencement of this Act, prepare emergency action plan within five years from the date of commencement of this Act and thereafter update such plans at regular intervals as may be specified by the regulations.

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- (2) The emergency action plan referred to in sub-section (1) shall,—
- (a) set out the procedures to be followed for the protection of persons and property upstream or downstream of the specified dam in the event of an actual or imminent dam failure or to mitigate the effects of the disaster;
 - (b) include therein,—
 - (i) the type of emergencies which are likely to occur in the operation of any reservoir;
 - (ii) identification of the likely catastrophic flood in the event of any dam failure, along with probable areas, population, structures and installations likely to be adversely affected due to flood water released from the reservoir;
 - (iii) warning procedures, inundation maps and advance preparations for handling efficiently and in the best possible manner the likely adverse situations especially to avoid loss of human life;
 - (*iv*) such other matters which may having regard to the geographical conditions, size of the dam and other relevant factors as may be necessary.
- (3) The emergency action plan under this section shall be put into action as and when conditions arise which are hazardous or likely to be hazardous to a specified dam or potentially hazardous to public safety, infrastructure, other property or to the environment.
- (4) Every owner of the specified dam shall, while preparing and updating the emergency action plan, undertake a consultation process with all disaster management agencies and other Departments of the State entrusted with disaster management and relief in the area likely to be affected and owners of other dams in the immediate vicinity likely to be affected, so as to bring coordination and transparency and allay any unwarranted fear on dam safety issues.

Assistance to other disaster management authorities.

37. Without prejudice to the provisions of this Act or liability of the owner of the specified dam and other organisations and authorities under this Act, every owner, organisation and authority shall render necessary assistance, if so required by any authority under any law for the time being in force to meet or mitigate any disaster or emergency arising out of the specified dams.

CHAPTER IX

COMPREHENSIVE DAM SAFETY EVALUATION

Comprehensive dam safety evaluation. **38.** (1) The owner of a specified dam shall make or cause to be made comprehensive dam safety evaluation of each specified dam through an independent panel of experts constituted as per regulations for the purpose of determining the conditions of the specified dam and its reservoir:

Provided that the first comprehensive dam safety evaluation for each existing specified dam shall be conducted within five years from the date of commencement of this Act, and thereafter the comprehensive dam safety evaluation of each such dam shall be carried out at regular intervals as may be specified by the regulations.

- (2) The comprehensive dam safety evaluation shall consists of, but not be limited to,—
 - (a) review and analysis of available data on the design, construction, operation, maintenance and performance of the structure;
 - (b) general assessment of hydrologic and hydraulic conditions with mandatory review of design floods as specified by the regulations;
 - (c) general assessment of seismic safety of specified dam with mandatory site specific seismic parameters study in certain cases as specified by the regulations;

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- (d) evaluation of the operation, maintenance and inspection procedures; and
- (e) evaluation of any other conditions which constitute a hazard to the integrity of the structure.
- **39**. The comprehensive dam safety evaluation referred to in section 38 shall be compulsory in the case of,—

Compulsory evaluation in certain cases.

- (a) major modification to the original structure or design criteria;
- (b) discovery of an unusual condition at the dam or reservoir rim; and
- (c) an extreme hydrological or seismic event.
- **40**. (1) The owner of a specified dam shall report the results of the dam safety evaluation undertaken under section 38 or section 39 to the State Dam Safety Organisation.

Reports of comprehensive evaluation.

- (2) The reports referred to in sub-section (1) shall include, but not be limited to,—
- (a) assessment of the condition of the structure based on the visual observations and available data on the design, hydrology, construction, operation, maintenance and performance of the structure;
- (b) recommendations for any emergency measures or actions, if required, to assure the immediate safety of the structure;
- (c) recommendations for remedial measures and actions related to design, construction, operation, maintenance and inspection of the structure, if required;
- (d) recommendations for additional detailed studies, investigations and analysis, if required; and
- (e) recommendations for improvements in routine maintenance and inspection of dam, if required.
- (3) Where the safety evaluations undertaken under section 38 or section 39, results in recommendations for a remedial action, the State Dam Safety Organisation shall pursue with the owner of the specified dam to ensure that remedial measures are carried out in time, for which the owner shall provide adequate funds.
- (4) Where there is any unresolved matter emerging between an independent panel of experts referred to in sub section (1) of section 38 and the owner of the specified dam, the matter shall be referred to the State Dam Safety Organisation, and, in case no agreement is arrived at, the matter shall be referred to the Authority which shall render its advice and send recommendations to the State Government concerned for implementation.

CHAPTER X

OFFENCES AND PENALTIES

41. Whoever, without reasonable cause,—

Punishment for obstruction,

- (a) obstructs any officer or employee of the Central Government or the State Government, or a person authorised by the National Committee or the Authority or the State Committee or the State Dam Safety Organisation in the discharge of his functions under this Act; or
- (b) refuses to comply with any direction given by or on behalf of the Central Government or the State Government or the National Committee or the Authority or the State Committee or the State Dam Safety Organisation under this Act,

shall be punishable with imprisonment for a term which may extend to one year or with fine, or with both, and if such obstruction or refusal to comply with directions results in loss of lives or imminent danger thereof, shall be punishable with imprisonment for a term which may extend to two years.

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Offences by Departments of Government.

- **42.** (1) Where an offence under this Act has been committed by a Department of the Government, the head of the Department shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly unless he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.
- (2) Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a Department of the Government and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any officer, other than the head of the Department, such officer shall be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

Offence by companies.

43. (1) Where an offence under this Act has been committed by a company or body corporate, every person who at the time the offence was committed, was in charge of, and was responsible to, the company, for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the contravention and shall be liable to be proceeded against and punished accordingly:

Provided that nothing in this sub-section shall render any such person liable to any punishment provided in this Act, if he proves that the offence was committed without his knowledge or that he exercised due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a company, and it is proved that the offence was committed with the consent or connivance of, or is attributable to any neglect on the part of any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also, be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

Explanation.—For the purpose of this section—

- (a) "company" means any body corporate and includes a firm or other association of individuals; and
 - (b) "director", in relation to a firm, means a partner in the firm.

Cognizance of offences.

- **44.** (1) No court shall take cognizance of any offence punishable under this Act, except on a complaint made by the Central Government or the State Government or a person authorised in this behalf by the National Committee or the Authority or the State Committee or the State Dam Safety Organisation, as the case may be.
- (2) No court inferior to that of a Metropolitan Magistrate or a Judicial Magistrate of the first class shall try any offence punishable under this Act.

CHAPTER XI

MISCELLANEOUS

Annual report of safety status of specified dam.

- **45.** (1) Every State Dam Safety Organisation shall prepare annual report, within three months of the expiry of the preceding financial year, of its activities and safety status of specified dams in the State and such report shall be forwarded to the Authority and State Government and that Government shall cause the same to be laid before each House of the State Legislature, where it consists of two Houses or where such Legislature consists of one House, before that House.
- (2) Every State Dam Safety Organisation and every owner of a specified dam shall provide to the Authority, documentation of the projects, report of enquiries into failure and any other data, as and when required in such format and in such manner as may be decided by the Authority.
- (3) The Authority, shall prepare a consolidated annual report of the dam safety activities in the country and submit the same to the Central Government within six months of the

expiry of the preceding financial year and that Government shall cause the same to be laid before each House of Parliament.

- (4) The Authority shall forward its annual report on the safety status of specified dams to the National Disaster Management Authority and also make available such report in public domain.
- (5) The State Dam Safety Organisation of each State shall forward their annual report to the concerned State Disaster Management Authority and also make available such report in public domain.
- **46.** Every owner of the dam other than specified dams shall undertake such measures as may be necessary to ensure dam safety and shall comply with such measures as may be specified by the regulations.

measures in respect of dams other than specified dams.

47. Where a dam, including a dam created due to landslides or glacial moraine, is located outside the territory of India and the Authority suo motu or on receipt of information from any person or organisation or authority or source prima facie is of the opinion that measures are required to be taken to ensure safety of such dams and failure of which may endanger the life and property of people located in India, it shall in writing submit an intimation thereof to the Central Government indicating therein the likely damages which may arise due to failure of such dams and the safety measures required to be taken in respect of such dam and the Central Government shall take all suitable measures to mitigate any possible threat.

Safety measures in respect of dams located outside territory of India.

48. The provisions of this Act shall have effect notwithstanding anything inconsistent therewith contained in any other law for the time being in force.

Act to have overriding effect.

49. (1) If the Central Government is satisfied that it is necessary or expedient so to do, it may, by notification, amend the First Schedule, the Second Schedule or the Third Schedule and thereupon the Schedules, shall be deemed to have been amended accordingly.

Power to amend Schedules.

- (2) A copy of every notification made under sub-section (1) shall be laid before each House of Parliament as soon as may be after it is made.
- **50.** The Central Government may give such directions, as it may consider necessary, to the State Government where that Government is the owner of the specified dam and to the owner of a specified dam in any other case for the effective implementation of the provisions of this Act.

- 51. No act or proceedings of the National Committee, the Authority and the State Committee shall be invalid merely by reason of-
 - (a) any vacancy in, or any defect in the constitution of, the Authority; or
 - (b) any defect in the appointment of a person acting as a member of the Authority; or
 - (c) any irregularity in the procedure of the Authority not affecting the merits of the case.
- **52.** (1) The Central Government may, by notification, make rules to carry out the provisions of this Act.
- (2) In particular, and without prejudice to the foregoing power, such rules may provide for all or any of the following matters, namely:-
 - (a) the time and place of the meetings of the National Committee and the procedure to be followed at such meetings under sub-section (1) of section 7 and the expenditure incurred on the meetings of the National Committee under sub-section (3) of section 7:

Power of Central Government to give directions.

Vacancies, etc., not to invalidate proceedings of National Committee on Dam Safety Authority and State Committee on Dam Safety.

Power of Central Government to make rules.

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- (b) the qualifications and experience of the officers and other employee of the Authority in the field of dam safety or such other field under sub-section (1) of section 10;
- (c) the functions, powers, and terms and conditions of service of other officers and other employees of the Authority under sub-section (2) of section 10;
- (d) any other matter which is to be, or may be, prescribed or in respect of which provision is to be made by the Central Government by rules.

Power of State Government to make rules.

- **53.** (1) The State Government may, by notification, make rules to carry out the provisions of this Act.
- (2) In particular, and without prejudice to the foregoing power, such rules may provide for all or any of the following matters, namely:—
 - (a) the times and places of the meetings of the State Committee and the procedure to be followed at such meetings under sub-section (1) of section 13;
 - (b) the expenditure incurred on the meetings of the State Committee under sub-section (3) of section 13;
 - (c) the fee and allowances paid to the specialist members or expert invitees of the State Committee or its sub-committees under sub-section (4) of section 13;
 - (d) the organisational structure and work procedure of State Dam Safety Organisation under sub-section (3) of section 14;
 - (e) the qualifications and experience of the officers and other employees of the State Dam Safety Organisation in the field of dam safety or such other field under sub-section (1) of section 15;
 - (f) the functions, powers, and terms and conditions of service of the employees of the State Dam Safety Organisation under sub-section (2) of section 15;
 - (g) the dam safety measures in respect of dams other than specified dams under section 46;
 - (h) any other matter which is to be, or may be, prescribed or in respect of which provision is to be made by the State Government by rules.
- (3) Every rule made by a State Government under this Act shall be laid, as soon as may be after it is made, before the State Legislature, where it consists of two Houses, or where such legislature consists of one House, before that House.

Power to make regulations by Authority.

- **54.** (1) The Authority on the recommendations of the National Committee may make regulations consistent with this Act and the rules made thereunder to carry out the provisions of this Act.
- (2) In particular, and without prejudice to the generality of the foregoing power, such regulations may provide for all or any of the following matters, namely:—
 - (a) the guidelines, standards and other directions for achieving the satisfactory level of dam safety assurance under sub-section (I) of section 16;
 - (b) the vulnerability and hazard classification criteria of specified dams under section 17;
 - (c) the details and form pertaining to the maintenance of log books or database under sub-section (1) of section 18;
 - (d) the qualifications, experience and training of the individuals responsible for safety of specified dams under section 23;
 - (e) the employment of competent engineers and their qualifications and experience for the purpose of investigation, design and construction of specified dams under sub-section (3) of section 26;

- (f) the quality control measures for the purpose of dam construction under sub-section (5) of section 26;
 - (g) the level of competent engineers for the dam safety units under section 30;
- (h) the guidelines and check-lists for inspection of specified dams under clause (a) of sub-section (3) of section 31;
- (i) the minimum number of set of instrumentations in the specified dams and the manner of their installation under sub-section (1) of section 32;
- (j) the form, manner and time interval for forwarding the analysis of readings to the State Dam Safety Organisation under sub-section (2) of section 32;
- (k) the data requirements of hydro-meteorological stations in the vicinity of specified dams under sub-section (1) of section 33;
- (1) the data requirements of seismological stations in the vicinity of specified dams under sub-section (1) of section 34;
- (m) the suitable location and manner of collection, compliance, process and storage of data under sub-section (2) of section 34;
- (n) the time interval of risk assessment studies to be carried out under sub-section (2) of section 35;
- (o) time interval for updating the emergency action plan under clause (b) of sub-section (1) of section 36;
- (p) the time interval for the comprehensive safety evaluation of specified dams under sub-section (1) of section 38;
- (q) the mandatory review of design flood of existing specified dams under clause (b) of sub-section (2) of section (3);
- (r) the mandatory site specific seismic parameter studies of existing specified dams under clause (c) of sub-section (2) of section 38;
- (s) the measures necessary to ensure dam safety by every owner of dam other than specified dams under section 46;
- (t) any other matter which is to be specified or in respect of which provision is to be made by the Authority.
- 55. Every rule and every regulation made by the Central Government under this Act shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the rule or regulation or both Houses agree that the rule or regulation should not be made, the rule or regulation shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule or regulation.

Rules and regulations to be laid before Parliament.

56. (1) If any difficulty arises in giving effect to the provisions of this Act, the Central Government may, by order, published in the Official Gazette, make such provisions not inconsistent with the provisions of this Act, as may appear it to be necessary or expedient for removing the difficulty:

Power to remove difficulties.

Provided that no order shall be made under this section after the expiry of three years from the date of commencement of this Act.

(2) Every order made under this section shall, as soon as may be after it is made, be laid before each House of Parliament.

THE FIRST SCHEDULE

[See section 6(1)]

FUNCTIONS OF NATIONAL COMMITTEE ON DAM SAFETY

- For the purposes of maintaining standards of dam safety and prevention of dam failure related disasters, evolve dam safety policies and recommend necessary regulations as may be required;
- 2. act as a forum for exchange of views on techniques to be adopted for remedial measures to relieve distress conditions in specified dams and appurtenant structures;
- 3. analyse the causes of major dam incidents and dam failures and suggest changes in the planning, specifications, construction, operation and maintenance practices in order to avoid recurrence of such incidents and failures;
- 4. evolve comprehensive dam safety management approach as an integration of dam safety evaluation, risk assessment and risk management for the desired level of safety assurance; and also explore compensations, by means of insurance coverage for the people affected by dam failures;
- 5. render advice on any specific matter relating to dam safety which may be referred to it by the Central Government or the State Government, as the case may be;
- 6. make recommendations on a request by the Central Government on safety measures in respect of dams located outside the territory of India;
 - 7. make recommendations on the rehabilitation requirements of ageing dams;
- 8. provide strategic supervision for such dam rehabilitation programmes that are executed in States through central or externally aided funding;
- 9. identify areas of research and development for dam safety and recommend for provision of funds;
- 10. make recommendations on the coordinated reservoir operations of cascading dams; and
- 11. any other specific matter relating to dam safety which may be referred to it by the Central Government.

THE SECOND SCHEDULE

[See section 9(1)]

FUNCTIONS OF NATIONAL DAM SAFETY AUTHORITY

- 1. For the purpose of maintaining standards of dam safety and prevention of dam failure related disasters, discharge such functions as related to implementation of the policies made by the National Committee including making regulations on the recommendations of the National Committee;
- 2. resolve any issue between the State Dam Safety Organisations of States or between a State Dam Safety Organisation and any owner of a specified dam in that State;
- 3. provide the state-of-the-art technical and managerial assistance to the State Dam Safety Organisations;
- 4. maintain a national level database of all specified dams in the country, including serious distress conditions, if any, noticed therein;
- 5. maintain liaison with the State Dam Safety Organisations and the owners of the specified dams for standardisation of dam safety related data and practices, and related technical or managerial assistance;
- 6. lay down guidelines and check-lists for the routine inspection and detailed investigation of the specified dams and appurtenant structures;
 - 7. maintain the records of major dam failures in the country;
- 8. examine, as and when necessary, either through its own engineers or through a panel of experts, the cause of any major dam failure, and submit its report to the National Committee:
- 9. examine whenever required, either through its own engineers or through a panel of experts, the cause of any major public safety concern in respect of any specified dam, and issue appropriate instructions relating to further investigations, operational parameters or remedial measures;
- 10. lay down the uniform criteria for vulnerability and hazard classification of the specified dams in the country, and review such criteria as and when necessary;
 - 11. give directions regarding maintenance of log books or database;
- 12. give directions regarding qualifications and experience requirements of individuals responsible for safety of the specified dams;
- 13. accord accreditations to the agencies that may be entrusted with the investigation, design, construction and alteration of the specified dams;
- 14. disqualify any agency for taking up investigation, design, construction or alteration of the specified dams, if it violates any of the regulations made under this Act;
- 15. give directions regarding qualification and experience requirements of individuals responsible for investigation, design and construction of the specified dams;
- 16. give directions regarding quality control measures to be undertaken during construction of the specified dams;
- 17. lay down guidelines for preventive measures in the areas vulnerable to landslides in the vicinity of a specified dam under construction;
- 18. give directions regarding competent levels of engineers in the dam safety units of the specified dams on the basis of vulnerability and hazard classification of such dams;
- 19. give directions regarding instrumentation requirements and manner of their installation for monitoring the performance of the specified dams;

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- 20. give directions regarding data requirements of hydro-meteorological stations in the vicinity of the specified dams;
- 21. give directions regarding data requirements of seismological stations in the vicinity of the specified dams;
- 22. give directions regarding time interval for the risk assessment studies of the specified dams on the basis of vulnerability and hazard classification of such dams;
- 23. give directions regarding time interval for updating the emergency action plans of the specified dams on the basis of vulnerability and hazard classification of such dams;
- 24. give directions regarding constitution of independent panel of experts for comprehensive dam safety evaluation of the specified dams;
- 25. give directions regarding time interval for the comprehensive safety evaluation of the specified dams on the basis of vulnerability and hazard classification of such dams;
 - 26. lay down guidelines for review of design floods of existing the specified dams;
- 27. lay down guidelines for review of site specific seismic parameter studies of the specified dams;
- 28. establishment of an early warning system incorporating appropriate framework for the exchange of real time hydrological and meteorological data and information related to operation of reservoirs by the owner of a dam;
 - 29. promote general education and awareness in relation to dam safety;
 - 30. provide secretarial assistance to the National Committee and its sub-committees;
- 31. provide coordination and overall supervision of dam rehabilitation programmes that are executed in States through central or externally aided funding; and
- 32. any other specific matter relating to dam safety which may be referred to it by the Central Government.

THE THIRD SCHEDULE

[See section 12(1)]

FUNCTIONS OF STATE COMMITTEE ON DAM SAFETY

- 1. For the purpose of maintaining standards of dam safety and prevention of dam failure related disasters, discharge such functions as may be necessary as per the guidelines, standards and other directions issued by the Authority;
 - review the work done by the State Dam Safety Organisation;
- 3. establish priorities for investigations in case of specified dams under distress condition;
- 4. in cases where investigations with respect to safety of any specified dam in the State had already been undertaken, to order further investigations in relation to safety of such specified dam and assign responsibilities for execution including the use of non-departmental resources, and association of independent experts where necessary;
- 5. recommend the appropriate measures to be taken in relation to the safety of the specified dam which is under distress condition;
 - 6. establish priorities among projects requiring remedial safety works;
 - 7. review the progress on measures recommended in relation to dam safety;
- 8. assess potential implication of reservoir filling of a specified dam in the State on any upstream State, and coordinate mitigation measures with such upstream States;
- 9. assess potential implication of failure of a specified dam in the State on any downstream State, and coordinate mitigation measures with such downstream States;
- 10. assess probability of cascading dam failure, and coordinate mitigation measures with all concerned, including bordering States;
- 11. recommend provision of funds for the purpose of planned and appropriately phased rehabilitation of ageing dams in the State;
- 12. provide strategic supervision for such dam improvement and rehabilitation programmes that are executed through State funding; and
- 13. any other specific matter relating to dam safety which may be referred to it by the State Government.

DR. REETA VASISHTA, Secretary to the Govt. of India.

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असाधारण EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii) PART II—Section 3—Sub-section (ii)

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जल शिक्त मंत्रालय

(जल संसाधन, नदी विकास एवं गंगा संरक्षण विभाग)

अधिसूचना

नई दिल्ली, 30 दिसम्बर, 2021

का.आ. 5422(अ).—केन्द्रीय सरकार बांध सुरक्षा अधिनियम, 2021 (2021 का 41) की धारा 1 की उप-धारा (3) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, 30 दिसंबर, 2021 को उस तारीख के रूप में नियुक्त करती है जिस दिन से उक्त अधिनियम के उपबंध लागू होंगे।

[फा. सं. एन-52011/2/2021-बीएम अनुभाग-एमओडब्ल्यूआर] संजय अवस्थी, संयुक्त सचिव

MINISTRY OF JAL SHAKTI

(Department of Water Resources, River Development and Ganga Rejuvenation)

NOTIFICATION

New Delhi, the 30th December, 2021

S.O. 5422(E).—In exercise of the powers conferred by sub-section (3) of section 1 of the Dam Safety Act, 2021(41 of 2021), the Central Government hereby appoints the 30th December, 2021 as the date on which the provisions of the said Act shall come into force.

[F. No. N-52011/2/2021-BM Section-MOWR] SANJAY AWASTHI, Jt. Secy.

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ALOK KUMAR Digitally signed by ALOK KUMAR OF BELL 1939

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Agenda Item 1.1.2 & 1.1.3 Constitution of NCDS & NDSA

Annexure 1.2

रजिस्ट्री सं. डी.एल.- 33004/99

REGD. No. D. L.-33004/99



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असाधारण EXTRAORDINARY

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जल शक्ति मंत्रालय

अधिसूचना

नई दिल्ली, 17 फरवरी, 2022

का.आ. 757(अ).—केंद्रीय सरकार बांध सुरक्षा अधिनियम, 2021 (2021 का 41) की धारा 5 की उप-धारा (1) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, बांध सुरक्षा पर राष्ट्रीय समिति का गठन करती है और 18 फरवरी, 2022 को उस तारीख के रूप में निर्धारित करती है जिस दिन उक्त समिति निम्नलिखित संरचना के साथ लागू होगी, अर्थातु: -

5.1(क)	(1)	अध्यक्ष, केंद्रीय जल आयोग, जल शक्ति मंत्रालय, भारत सरकार; अध्यक्ष, पदे	
5.1(ख)	(2)	अध्यक्ष, राष्ट्रीय बांध सुरक्षा प्राधिकरण;	सदस्य ,पदेन
	(3)	सदस्य (डिजाइन और अनुसंधान), केंद्रीय जल आयोग, जल शक्ति मंत्रालय, भारत सरकार;	सदस्य ,पदेन
	(4)	सदस्य (हाइड्रो), केंद्रीय विद्युत प्राधिकरण, विद्युत मंत्रालय, भारत सरकार;	सदस्य ,पदेन
	(5)	जल संसाधन, नदी विकास और गंगा संरक्षण विभाग, जल शक्ति मंत्रालय, भारत सरकार के प्रतिनिधि, जो संयुक्त सचिव के पद से नीचे का न हो;	सदस्य ,पदेन
	(6)	राष्ट्रीय आपदा प्रबंधन प्राधिकरण, गृह मंत्रालय, भारत सरकार के प्रतिनिधि जो संयुक्त सचिव के पद से नीचे का न हो;	सदस्य ,पदेन
	(7)	पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय के प्रतिनिधि, जो संयुक्त सचिव, भारत सरकार के पद से नीचे का न हो;	सदस्य ,पदेन
	(8)	महानिदेशक, भारत मौसम विज्ञान विभाग, पृथ्वी विज्ञान मंत्रालय, भारत सरकार;	सदस्य ,पदेन

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	(9) महानिदेशक, भारतीय भूवैज्ञानिक सर्वेक्षण, खान मंत्रालय, भारत सरकार;		सदस्य ,पदेन
	(10)	निदेशक, राष्ट्रीय रिमोट सेंसिंग केंद्र, अंतरिक्ष विभाग, भारतीय अंतरिक्ष अनुसंधान संगठन, भारत सरकार;	सदस्य ,पदेन
	(11)	निदेशक, राष्ट्रीय भूभौतिकीय अनुसंधान संस्थान, विज्ञान और प्रौद्योगिकी मंत्रालय, भारत सरकार;	सदस्य ,पदेन
5.1(ग)	(12	राज्य सरकार के सात)7) प्रतिनिधि मुख्य अभियंता या समकक्ष स्तर रोटेशन द्वारा;	पदेन सदस्य
5.1(घ)	(13)	बांध सुरक्षा क्षेत्र और संबद्ध क्षेत्रों में तीन)3) विशेषज्ञ;	सदस्य,
	(14)	सदस्य (नीति और अनुसंधान), एनडीएसए, भारत सरकार।	सचिव

- (2) केंद्रीय सरकार द्वारा नीचे खंड़ (2.1) में वर्णित प्रक्रिया के अनुसार राज्य सरकारों के सात (7) प्रतिनिधि, मुख्य अभियंता या समकक्ष के स्तर के निम्नलिखित समूहों से रोटेशन द्वारा सदस्यों, पदेन के रूप में नामित किए जाएंगे -
- क. समूह 1 आंध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु
- ख. समूह 2 हिमाचल प्रदेश, पंजाब, उत्तराखंड, हरियाणा
- ग. समूह 3 अरुणाचल प्रदेश, असम, मेघालय, सिक्किम
- घ. समूह 4 मणिपुर, मिजोरम, नागालैंड, त्रिपुरा
- ङ. समृह 5 बिहार, ओडिशा, झारखंड, पश्चिमी बंगाल
- च. समूह 6- गुजरात, महाराष्ट्र, तेलंगाना, गोवा
- छ. समूह 7 राजस्थान, उत्तर प्रदेश, मध्य प्रदेश, छत्तीसगढ़
- (2.1) सात समूहों में से प्रत्येक में से एक सदस्य, तीन वर्ष का कार्यकाल पूरा होने के बाद, केंद्रीय सरकार द्वारा, सदस्य, पदेन के रूप में, रोटेशन द्वारा नामित किया जाएगा।
- (3) राष्ट्रीय समिति राज्यों, संघ राज्य क्षेत्रों के प्रतिनिधि, किसी निर्दिष्ट बांध के मालिक और बांध सुरक्षा में ऐसे अन्य विशेषज्ञों (अंतरराष्ट्रीय विशेषज्ञों सहित) को आमंत्रित कर सकती है, जैसा कि वह अधिनियम की धारा (7) की उपधारा (2) के अधीन अपने कार्यों के उन्मोचन के लिए उचित समझे।
- (4) राष्ट्रीय बांध सुरक्षा समिति की उपरोक्त संरचना इस अधिसूचना की तारीख से तीन वर्ष के लिए लागू होगी, और उसके बाद समिति का पुनर्गठन किया जाएगा।

[फा. सं. एन-52011/1/2021-बीएम अनुभाग-एमओडब्ल्यूआर] संजय अवस्थी, संयुक्त सचिव

MINISTRY OF JAL SHAKTI NOTIFICATION

New Delhi, the 17th February, 2022

S.O. 757(E).—In exercise of the powers conferred by sub-section (1) of section 5 of the Dam Safety Act, 2021 (41 of 2021), the Central Government hereby constitutes the National Committee on Dam Safety and appoints the 18th February, 2022 as the date on which the said committee shall come into force, with the following composition, namely:-

Government of India;		Chairman, Central Water Commission, Ministry of Jal Shakti, Government of India;	Chairperson, ex officio
		Chairman, National Dam Safety Authority;	Member, ex officio

[भाग II—खण्ड 3(ii)] भारत का राजपत्र : असाधारण 3

	(3)	Member (Design & Research), Central Water Commission, Ministry of Jal Shakti, Government of India;	Member, ex officio
	(4)	Member (Hydro), Central Electricity Authority, Ministry of Power, Government of India;	Member, ex officio
	(5)	Representative of D/o of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, Government of India not below the rank of Joint Secretary;	Member, ex officio
	(6)	Representative of National Disaster Management Authority, Ministry of Home Affairs, Government of India not below the rank of Joint Secretary;	Member, ex officio
	(7)	Representative of Ministry of Environment, Forest and Climate Change, not below the rank of Joint Secretary, Government of India;	Member, ex officio
	(8)	Director General, India Meteorological Department, Ministry of Earth Science, Government of India;	Member, ex officio
	(9)	Director General, Geological Survey of India, Ministry of Mines, Government of India;	Member, ex officio
	(10)	Director, National Remote Sensing Centre, Department of Space, Indian Space Research Organisation, Government of India;	Member, ex officio
	(11)	Director, National Geophysical Research Institute, Ministry of Science and Technology, Government of India;	Member, ex officio
5.1(c)	(12)	Seven (7) representatives of the State Government of the level of Engineer-in-chief or equivalent by rotation;	Member, ex officio
5.1(d)	(13)	Three (3) specialists in the field of dam safety and allied fields;	Member
	(14)	Member (Policy and Research), NDSA, Government of India.	Secretary

- (2) Seven (7) representatives of the State Governments, of the level of Engineer-in-Chief or equivalent from the following groups by rotation, to be nominated by the Central Government as Members, *ex officio* as per the procedure mentioned at clause (2.1) below:
 - a. Group I Andhra Pradesh, Karnataka, Kerala, Tamil Nadu
 - b. Group II Himachal Pradesh , Punjab, Uttarakhand, Haryana
 - c. Group III Arunachal Pradesh, Assam, Meghalaya, Sikkim
 - d. Group IV Manipur, Mizoram, Nagaland, Tripura
 - e. Group V Bihar, Odisha, Jharkhand, West Bengal
 - f. Group VI Gujarat, Maharashtra, Telangana, Goa
 - g. Group VII Rajasthan Uttar Pradesh, Madhya Pradesh, Chhattisgarh
- (2.1) One member from each of the seven groups shall be nominated, on rotation, by the Central Government as members, *ex officio*, after completion of tenure of three years.
- (3) The National Committee may invite the representative of the States, Union Territories, owner of any specified dam and such other experts in dam safety (including international experts) as it may consider appropriate for the discharge of its functions under sub-section (2) of section (7) of the Act.
- (4) The above composition of National Committee on Dam Safety shall be in force for three years from the date of this Notification, and thereafter the committee shall be re-constituted.

[F. No. N-52011/1/2021-BM Section-MOWR] SANJAY AWASTHI, Jt. Secy.

[PART II—SEC. 3(ii)]

अधिसूचना

नई दिल्ली, 17 फरवरी, 2022

का.आ. 758(अ).—केन्द्रीय सरकार, बांध सुरक्षा अधिनियम, 2021 (2021 का 41) की धारा 8 की उप-धारा (1) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, उक्त अधिनियम के अधीन राष्ट्रीय प्राधिकरण की शक्तियों और कृत्यों का निर्वहन करने के लिए राष्ट्रीय बांध सुरक्षा प्राधिकरण के नाम से ज्ञात एक प्राधिकरण की स्थापना करती है और 18 फरवरी, 2022 को उस तारीख के रूप में नियत करती है, जिसको उक्त प्राधिकरण प्रवृत्त होगा I

[फा. सं. एन-52011/1/2021-बीएम अनुभाग-एमओडब्ल्यूआर]

संजय अवस्थी, संयुक्त सचिव

NOTIFICATION

New Delhi, the 17th February, 2022

S.O. 758(E).—In exercise of the powers conferred by sub-section (1) of section 8 of the Dam Safety Act, 2021 (41 of 2021), the Central Government hereby establishes an Authority to be known as the National Dam Safety Authority to discharge the powers and functions of the National Authority under the said Act, and hereby appoints the 18th February, 2022 as the date on which the said Authority shall come into force.

[F. No. N-52011/1/2021-BM Section-MOWR] SANJAY AWASTHI, Jt. Secy.

Agenda Item 1.1.2 Nomination of States and Expert Members of NCDS

Annexure 1.3

No.N-52011/2/2021-BM Government of India Ministry of Jal Shakti Department of Water Resources, RD & GR Peninsular Rivers Wing

> Room No. 357-A Wing Krishi Bhawan, New Delhi, Dated: the 6th April, 2022

OFFICE MEMORANDUM

Sub: Nomination of members for the National Committee on Dam Safety.

I am directed to refer to the above mentioned subject and to convey that with the approval of the competent authority, following Seven States have been nominated as members of the National Committee on Dam Safety, constituted in compliance of the provisions of the Dam Safety Act 2021, vide Gazette Notification dated 17.02.2022, for a period of three years:

- 1. ANDHRA PRADESH
- 2. HIMACHAL PRADESH
- 3. ARUNACHAL PRADESH
- 4. MANIPUR
- 5. BIHAR
- 6. GUJARAT
- 7. RAJASTHAN
- 2. Further, the Competent authority has also accorded the approval for nomination of following two specialists in the field of dam safety as members of the National Committee on Dam Safety:
 - 1. Sh. D K Sharma, Chairman, Himachal Pradesh Electricity Regulatory Commission.
 - 2. Prof. C V R Murty, P S Rao Institute Chair Professor, Department of Civil Engineering, IIT Madras

Signed by Kanchan Bala Hamza (KDateh66-04-20201470172)

Under Secretary to the Govt. of India E-mail-uspenriv-mowr@nic.in/Tel: 23383059

To,

- Chief Secretary, Government of Andhra Pradesh
- 2. Chief Secretary, Government of Himachal Pradesh
- 3. Chief Secretary, Government of Arunachal Pradesh
- 4. Chief Secretary, Government of Manipur
- 5. Chief Secretary, Government of Bihar
- 6. Chief Secretary, Government of Gujarat
- 7. Chief Secretary, Government of Rajasthan
- 8. Sh. D K Sharma, Chairman, Himachal Pradesh Electricity Regulatory Commission
- 9. Prof. C V R Murty, Department of Civil Engineering, IIT Madras

Copy to:

- 1. Chairman, Central Water Commission, Sewa Bhawan, R K Puram, New Delhi
- 2. Member (D&R), Central Water Commission, Sewa Bhawan, R K Puram, New Delhi
- 3. Director, IIT Madras, Chennai

Copy for kind information to:

- 1. PS to Hon'ble Minister (Jal Shakti)
- 2. PS to Hon'ble Minister of State (Jal Shakti)
- 3. PPS to Secretary (WR, RD & GR)
- 4. PPS to Additional Secretary (WR, RD&GR)
- 5. PPS to Joint Secretary (A, IC & GW)
- 6. PPS to Joint Secretary (RD&PP)

Agenda Item 1.1.2 & 1.1.3 Notification regarding RULES of NCDS & NDSA

Annexure 1.4

रजिस्ट्री सं. डी.एल.- 33004/99

REGD. No. D. L.-33004/99



सी.जी.-डी.एल.-अ.-17022022-233571 CG-DL-E-17022022-233571

असाधारण EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i) PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित PUBLISHED BY AUTHORITY

सं. 132]

नई दिल्ली, बृहस्पतिवार, फरवरी 17, 2022/माघ 28, 1943 NEW DELHI, THURSDAY, FEBRUARY 17, 2022/MAGHA 28, 1943

No. 132]

जल शक्ति मंत्रालय

अधिसूचना

नई दिल्ली, 17 फरवरी,2022

सा.का.नि. 134(अ).—केंद्रीय सरकार, बांध सुरक्षा अधिनियम, 2021 (2021 का 41) की धारा 52 की उपधारा (2) के खंड (क) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए निम्नलिखित नियम बनाती है, अर्थात्: -

- 1. संक्षिप्त नाम और प्रारंभ:- (1) इन नियमों का संक्षिप्त नाम 'राष्ट्रीय बांध सुरक्षा समिति (प्रक्रिया, भत्ता और अन्य व्यय) नियम, 2022' है।
 - (2) वे राजपत्र में उनके प्रकाशन की तारीख से प्रवृत्त होंगे।
- 2. परिभाषा:- (1) इन नियमों में, जब तक कि संदर्भ से अन्यथा अपेक्षित न हो:
- (क) "अधिनियम" से बांध सुरक्षा अधिनियम, 2021 (2021 का संख्या 41) अभिप्रेत है;
- (ख) "प्राधिकरण" से अधिनियम की धारा 8 के अधीन स्थापित राष्ट्रीय बांध सुरक्षा प्राधिकरण अभिप्रेत है;
- (ग) "अध्यक्ष" से अधिनियम की धारा 5 की उपधारा (1) के खंड (क) के अधीन बांध सुरक्षा पर राष्ट्रीय समिति के अध्यक्ष अभिप्रेत है:
- (घ) "सदस्य" से आधिकारिक राजपत्र में प्रकाशित राष्ट्रीय समिति के संविधान की अद्यतन अधिसूचना के अनुसार बांध सुरक्षा पर राष्ट्रीय समिति का सदस्य अभिप्रेत है;
- (ङ) "राष्ट्रीय समिति" से अधिनियम की धारा 5 के अधीन गठित राष्ट्रीय बांध सुरक्षा समिति अभिप्रेत है;
- (च) "आमंत्रित" से अधिनियम की धारा 7 की उपधारा (2) के अधीन राष्ट्रीय बांध सुरक्षा समिति का आमंत्रित व्यक्ति अभिप्रेत है;

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- (छ) "सचिव" से राष्ट्रीय समिति के आधिकारिक राजपत्र में प्रकाशित राष्ट्रीय समिति के गठन की अद्यतन अधिसूचना के अनुसार राष्ट्रीय बांध सुरक्षा समिति का सचिव अभिप्रेत है;
- (ज) "धारा" से अधिनियम की धारा अभिप्रेत है;
- (झ) "उप-समिति" से अधिनियम की धारा 6 की उपधारा (2) के अधीन राष्ट्रीय बांध सुरक्षा समिति द्वारा गठित एक उप-समिति अभिप्रेत है।
- (2) यहां प्रयुक्त शब्दों और अभिव्यक्तियों जो इन नियमों में परिभाषित नहीं हैं, लेकिन अधिनियम में परिभाषित हैं, का वही अर्थ होंगे जो उन्हें अधिनियम में दिए गए हैं।

3. राष्ट्रीय समिति की बैठकों का समय और स्थान:-

- (क) राष्ट्रीय समिति की बैठक की तारीख, समय और स्थान राष्ट्रीय समिति के अध्यक्ष द्वारा तय किया जाएगा: परन्तु एक वर्ष में कम से कम दो बैठकें आयोजित की जाएंगी, जिनमें से एक बैठक मानसून के मौसम की शुरुआत से पहले होगी।
- (ख) राष्ट्रीय समिति के सचिव कम से कम दो सप्ताह पहले बैठक की सूचना देंगे। आपात स्थितियों में, राष्ट्रीय समिति के अध्यक्ष द्वारा नोटिस की अवधि को उपयुक्त रूप से कम किया जा सकता है।

4. राष्ट्रीय समिति द्वारा अपनाई जाने वाली प्रक्रिया:-

- (क) राष्ट्रीय समिति की किसी भी बैठक के लिए कार्यसूची, अध्यक्ष द्वारा विधिवत अनुमोदित, कम से कम एक सप्ताह पहले सचिव द्वारा परिचालित की जाएगी, जब तक कि कोई आपात स्थिति न हो।
- (ख) राष्ट्रीय सिमिति के अध्यक्ष राष्ट्रीय सिमिति की बैठकों की अध्यक्षता करेंगे:
 परन्तु किसी बैठक की अध्यक्षता करने में अध्यक्ष की अक्षमता के मामले में, सदस्य (डिजाइन और अनुसंधान),
 केंद्रीय जल आयोग उस बैठक की अध्यक्षता करेगा।
- (ग) राष्ट्रीय समिति सामान्य रूप से अपने सदस्यों की सहमित से अपने निर्णयों पर पहुंचेगी। किसी भी बड़े मतभेद के मामले में, समिति के निर्णय उपस्थित और मतदान करने वाले सदस्यों के बहुमत से किए जाएंगे, और मतों की समानता की स्थिति में, अध्यक्ष या बैठक की अध्यक्षता करने वाले व्यक्ति का निर्णायक मत होगा। समिति में आमंत्रित लोगों को मतदान का अधिकार नहीं होगा।
- (घ) राष्ट्रीय समिति ऐसी उप-समितियों का गठन कर सकती है और ऐसे कार्यकाल के लिए जो आवश्यक समझे, ताकि अपने कार्यों के निर्वहन में सहायता प्राप्त कर सकें, परन्तु
 - (i) उप-समिति के अध्यक्ष और सदस्य का निर्णय राष्ट्रीय समिति के अध्यक्ष द्वारा लिया जाएगा;
- (ii) उप-समिति के कार्य संचालन के संबंध में प्रक्रियाएं राष्ट्रीय समिति द्वारा तय की जाएंगी;
- (iii) सिमिति आवश्यकता पड़ने पर ऐसी उप-सिमिति के कार्यकाल और संरचना की सिमीक्षा कर सकती है।
- (ङ) अध्यक्ष, राष्ट्रीय समिति की ओर से किसी विनिर्दिष्ट बांध के स्वामी के प्रतिनिधि और बांध सुरक्षा में ऐसे अन्य विशेषज्ञों (अंतर्राष्ट्रीय विशेषज्ञों सहित) को आमंत्रित कर सकता है, जैसा कि वह अपने कार्यों के निर्वहन के लिए उपयुक्त समझे।
- (च) राष्ट्रीय समिति किसी भी बांध/परियोजना का दौरा करने के लिए एक टीम नामित कर सकती है जिसे समिति द्वारा आवश्यक समझा जाए।
- (छ) राष्ट्रीय समिति की बैठकों के कार्यवृत्त, अध्यक्ष द्वारा विधिवत अनुमोदित, सचिव द्वारा राष्ट्रीय समिति के सभी सदस्यों और आमंत्रितों को अग्रेषित किए जाएंगे। बैठक के कार्यवृत्त को सभी 'वांध सुरक्षा पर राज्य समितियों', सभी 'राज्य बांध सुरक्षा संगठनों', निर्दिष्ट बांधों के सभी मालिकों और अन्य संबंधित हितधारकों के साथ साझा किया जाएगा।
- (ज) राष्ट्रीय समिति और इसकी उप-समितियों को सचिवीय सहायता प्राधिकरण द्वारा प्रदान की जाएगी।

(झ) राष्ट्रीय समिति और उप-समितियों की किसी भी बैठक से संबंधित सभी रिकॉर्ड प्राधिकरण द्वारा बनाए रखा जाएगा, और प्राधिकरण सभी हितधारकों के लिए प्रासांगिक जानकारी और सूचना का प्रसार भी करेगा।

5. राष्ट्रीय समिति के भत्ते और अन्य व्यय:-

- (क) अधिनियम की अनुसूची 1 में उल्लिखित उद्देश्यों के प्रयोजन को पूरा करने के लिए यात्रा भत्ता (टीए), महंगाई भत्ता (डीए), भागीदारी शुल्क, अन्य आकस्मिक खर्च आदि से संबंधित व्यय, राष्ट्रीय समिति और उप-समिति (ओं) की बैठकों में भाग लेने या किसी भी बांध की ऑनसाइट विजिट पर जाने के लिए या पदेन सदस्यों और राज्यों, संघ राज्यक्षेत्रों के प्रतिनिधियों और बांध के मालिकों द्वारा बांध सुरक्षा के कुछ प्रमुख क्षेत्रों में जानकारी बढ़ाने के लिए किसी भी बांध के लिए या किसी जोखिम यात्रा का हिस्सा बनने के लिए किए गए खर्च को उनके संबंधित नियंत्रक प्राधिकरणों या संगठनों द्वारा वहन किया जाएगा।
- (ख) राष्ट्रीय समिति या इसकी उप-समितियों की बैठकों में भाग लेने वाले अंतरराष्ट्रीय विशेषज्ञों सहित विशेषज्ञ सदस्यों और अन्य विशेषज्ञ आमंत्रितों को सभी यात्रा भत्तों, दैनिक भत्तों सहित सभी आवास और बोर्डिंग शुल्क आदि सहित मानदेय का भुगतान किया जाएगा, जैसा कि केंद्रीय सरकार के मौजूदा नियमों के अनुसार गैर-सरकारी सदस्यों के लिए स्वीकार्य है और इस संबंध में खर्च राष्ट्रीय बांध सुरक्षा प्राधिकरण द्वारा वहन किया जाएगा।
- (ग) राष्ट्रीय समिति और उप-समितियों की बैठकों के आयोजन से संबंधित सभी व्यय और राष्ट्रीय समिति और उप-समितियों के कामकाज से संबंधित कोई भी अन्य विविध व्यय प्राधिकरण द्वारा वहन किया जाएगा।

[फा. सं. एन-52011/1/2021-बीएम अनुभाग-एमओडब्ल्यूआर] संजय अवस्थी, संयुक्त सचिव

MINISTRY OF JAL SHAKTI NOTIFICATION

New Delhi, the 17th February, 2022

- G.S.R. 134(E).—In exercise of the powers conferred by clause (a) of sub-section (2) of section 52 of the Dam Safety Act, 2021 (41 of 2021), the Central Government hereby makes the following rules, namely:-
- 1. Short-title and commencement:- (1) These rules shall be called the 'National Committee on Dam Safety (Procedures, Allowance and other Expenditure) Rules, 2022.
 - (2) They shall come into force on the date of their publication in the Official Gazette.
- 2. Definition:- (1) In these rules, unless the context otherwise requires:
 - (a) 'Act' means the Dam Safety Act, 2021 (No.41 of 2021);
 - (b) 'Authority' means the National Dam Safety Authority established under section 8 of the Act;
 - (c) 'Chairperson' means the Chairperson of the National Committee on Dam Safety under clause (a) of sub-section (1) of section 5 of the Act;
 - (d) 'Member' means the member of the National Committee on Dam Safety as per the latest notification of the constitution of the National Committee published in official Gazette;
 - (e) 'National Committee' means the National Committee on Dam Safety constituted under section 5 of the Act;
 - (f) 'invitee' means the invitee of the National Committee on Dam Safety under sub-section (2) of section 7 of the Act:
 - (g) 'Secretary' means the Secretary of the National Committee on Dam Safety as per the latest notification of the constitution of the National Committee published in official Gazette;
 - (h) "section" a section of the Act;
 - (i) "sub-committee" means a sub-committee constituted by the National Committee on Dam Safety under sub-section (2) of section 6 of the Act.

[PART II—SEC. 3(i)]

- (2) Words and expressions used herein and not defined in these rules but defined in the Act shall have the meanings respectively assigned to them in the Act.
- **3. Time and Place of the Meetings of the National Committee:** (a) Date, time and place of the meeting of the National Committee shall be as decided by the Chairperson of the National Committee:

Provided that at least two meetings shall be held in a year, of which one meeting shall be before the onset of the monsoon season.

- (b) Secretary of the National Committee shall give notice of the meeting at least two weeks in advance. In emergent conditions, the notice period can be suitably reduced by the Chairman of the National Committee.
- **4. Procedure to be followed by the National Committee:**(a) The Agenda for any meeting of the National Committee, duly approved by the Chairperson, shall be circulated by the Secretary at least one week in advance, unless there is an emergent situation.
 - (b) The Chairperson of the National Committee shall preside over the meetings of the National Committee:

Provided that in the case of Chairperson's inability to preside over any meeting, Member (Design and Research), Central Water Commission shall preside over that meeting.

- (c) The National Committee in general shall arrive at its decisions by consensus of its members. In case of any major differences, the decisions of the Committee shall be arrived by majority of votes of the members present and voting, and in the event of equality of votes, the Chairperson or the person presiding over the meeting shall have the casting vote. The invitees to the committee will not have voting right.
- (d) The National Committee may constitute such sub-committees and for such tenures as it may consider necessary, so as to seek assistance in discharge of its function, provided that:
 - The Chairman and members of the sub-committee shall be decided by the Chairperson of National Committee;
 - (ii) Procedures regarding transaction of the business of the sub-committee shall be as decided by National Committee;
 - (iii) The committee may review the tenure and composition of such sub-committee as and when required.
- (e) The Chairperson, on behalf of the National Committee may invite the representative of the owner of any specified dam and such other experts in dam safety (including international experts) as it may consider appropriate for the discharge of its functions.
- (f) The National Committee may nominate a team to visit any dam/project as may be considered essential by the Committee.
- (g) Minutes of Meetings of the National Committee, duly approved by the Chairperson, shall be forwarded by Secretary to all members and invitees of the National Committee. Minutes of Meetings shall also be shared with all 'State Committees on Dam Safety', all 'State Dam Safety Organisations', all owners of the specified dams, and other concerned stakeholders.
- (h) The secretarial assistance to the National Committee and it sub-committees shall be provided by the Authority.
- (i) All records related to the any meeting of the National Committee and sub-committees shall be maintained by the Authority, and Authority shall also disseminate the relevant knowledge and information to all stakeholders.
- 5. Allowances and other expenditure of the National Committee:- (a) Expenditure related to travelling allowance (TA), dearness allowance (DA), participation fees, other incidental expenses etc. incurred for attending the meetings of the National Committee and sub-committee(s) or to have on-site visit to any dam or to be part of any exposure visit to enhance knowledge in some leading area of dam safety by the *ex-officio* members and the invitee representatives of the States, Union Territories and owners of dam for meeting the purpose of objectives as mentioned in Schedule 1 of the Act shall be borne by their concerned controlling authorities or organisations.

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- (b) The specialist members and other expert invitees including international experts, who attend the meetings of the National Committee or its sub-committees shall be paid honorarium including travelling allowances, daily allowances including all lodging and boarding charges etc. as are admissible to non-officials as per the extant rules of the Central Government, and expenditure in this regard shall be borne by the National Dam Safety Authority.
- (c) All expenditure related to organizing of the meetings of the National Committee and sub-committees and any other miscellaneous expenditure related to functioning of the National Committee and sub-committees shall be borne by the Authority.

[F. No. N-52011/1/2021-BM Section-MOWR]

SANJAY AWASTHI, Jt. Secy.

अधिसूचना

नई दिल्ली, 17 फरवरी,2022

सा.का.नि. 135(अ).—केन्द्रीय सरकार बांध सुरक्षा अधिनियम, 2021 (2021 का 41) की धारा 52 की उप-धारा (2) के खंड (ख) और खंड (ग) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, निम्नलिखित नियम बनाती है, अर्थात्:

- 1. संक्षिप्त नाम और प्रारंभ:-
- (1) इन नियमों का संक्षिप्त नाम राष्ट्रीय बांध सुरक्षा प्राधिकरण (कृत्य और शक्तियां) नियम, 2022 है।
- (2) ये राजपत्र में उनके प्रकाशन की तारीख को प्रवृत्त होंगे।
- 2. परिभाषाएं:-
- (1) इन नियमों में, जब तक कि संदर्भ से अन्यथा अपेक्षित न हो:
- क. "अधिनियम" से बांध सुरक्षा अधिनियम, 2021 (2021 का 41) अभिप्रेत है;
- ख. "प्राधिकरण" से अधिनियम की धारा 8 के अधीन स्थापित राष्ट्रीय बांध सुरक्षा प्राधिकरण (एनडीएसए) अभिप्रेत है;
- ग. "अध्यक्ष" से राष्ट्रीय बांध सुरक्षा प्राधिकरण का अध्यक्ष अभिप्रेत है, जो अधिनियम की धारा 8 की उप-धारा (2) के अनुसार प्राधिकरण की अध्यक्षता करता है;
- घ. "राष्ट्रीय समिति" से अधिनियम की धारा 5 के अधीन गठित राष्ट्रीय बांध सुरक्षा समिति अभिप्रेत है;
- ड. "धारा" से अधिनियम की कोई धारा अभिप्रेत है:
- (2) उन शब्दों और पदों के, जो इसमें प्रयुक्त हैं और परिभाषित नहीं हैं, किन्तु अधिनियम में परिभाषित हैं, वहीं अर्थ होंगे जो उस अधिनियम में है।
- 3. प्राधिकरण की संरचना :-
- (1) अध्यक्ष, राष्ट्रीय बांध सुरक्षा प्राधिकरण, प्राधिकरण का प्रमुख होगा।
- (2) अध्यक्ष, एनडीएसए की सहायता करने के लिए पांच सदस्य होंगे। प्रत्येक सदस्य, समनुदेशित कृत्यों सहित निम्नलिखित पांच खंडों में से एक खंड की अध्यक्षता करेंगे:

क्र. सं.	खंड	कृत्य (अधिनियम की दूसरी अनुसूची में यथा समनुदेशित)
(1)	नीति और अनुसंधान: 'राष्ट्रीय बांध सुरक्षा सिमिति' का सिचवालय और उसकी उप-सिमितियाँ; विभिन्न दिशा- निर्देशों, मैनुअल, जांचसूची, अनुसंधान और विकास, जन जागरूकता और प्रसार, बांधों की सुभेद्यता और जोखिम वर्गीकरण आदि तैयार/पुनरीक्षण करना;	(1) राज्य बांध सुरक्षा संगठनों और विनिर्दिष्ट बांध के स्वामियों के साथ बांध सुरक्षा से संबंधित डाटा और पहलियों तथा तकनीकी या प्रबंधकीय सहायता संबंधी मानकीकरण के लिए संपर्क बनाए रखना; (2) विनिर्दिष्ट बांधों और अनुलग्न संरचनाओं के नेमी निरीक्षण और विस्तृत अन्वेषण के लिए मार्गदर्शक सिद्धांत और जांच सूचियां अधिकथित करना;

[PART II—SEC. 3(i)]

	THE GAZETTE O	F INDIA : EXTRAORDINARY [PARTII—SEC. 3
		(3) देश में विनिर्दिष्ट बांधों की भेद्यता और संकट के वर्गीकरण के लिए एक समान मानदंड अधिकथित करना और जब भी आवश्यक हो, ऐसे मानदंड का पुनर्विलोकन करना; (4) विद्यमान विनिर्दिष्ट बांधों के बाढ़ विन्यास के पुनर्विलोकन के लिए मार्गदर्शक सिद्धांत अधिकथित करना; (5) विनिर्दिष्ट बांधों के स्थल विनिर्दिष्ट भूकंपी पैरामीटर अध्ययनों के पुनर्विलोकन के लिए मार्गदर्शक सिद्धांत; (6) विद्यमान विनिर्दिष्ट बांधों के बाढ़ विन्यास के पुनर्विलोकन के लिए मार्गदर्शक सिद्धान्त अधिकथित करना; (7) राष्ट्रीय समिति और उसकी उपसमितियों को सचिवालयिक सहायता उपलब्ध कराना; (8) बांध सुरक्षा से संबंधित कोई अन्य विनिर्दिष्ट विषय, जो उसको केन्द्रीय सरकार द्वारा निर्दिष्ट किया जाए।
(11)	तकनीकी: जनशक्ति संबंधी निर्देश, व्यक्तिगत विशेषज्ञत: से संबंधित क्रियाकलाप, बांध सुरक्षा कर्मचारियों और अधिकारियों के अनुभव और योग्यता से संबंधित मामले, जांच, डिजाइन, संनिर्माण और गुणवत्ता नियंत्रण आदि के लिए एजेंसियों की मान्यता आदि।	(1) राज्य बांध सुरक्षा संगठनों को अद्यतन तकनीकी और प्रबंधकीय सहायता उपलब्ध कराना; (2) देश में सभी विनिर्दिष्ट बांधों के लिए राष्ट्रीय स्तर के डाटा बेस का अनुरक्षण करना, जिसके अंतर्गत उसमें अपेक्षित गंभीर दबाव की स्थितियां, यदि कोई हों, भी हैं; (3) देश में प्रमुख बांध संबंधी विफलताओं के अभिलेखों का अनुरक्षण करना; (4) विनिर्दिष्ट बांधों की सुरक्षा के लिए उत्तरदायी व्यक्तियों की अपेक्षित अर्हताओं और अनुभव के संबंध में निदेश देना; (5) ऐसे अभिकरणों को प्रत्यायन प्रदान करना, जिन्हें विनिर्दिष्ट बांधों का अन्वेषण, डिजाइन या संनिर्माण सौंपा जा सकेगा; (6) किसी ऐसे अभिकरण को विनिर्दिष्ट बांधों के अन्वेषण, डिजाइन, संनिर्माण या परिवर्तन करने से निर्राहित करना, यदि वह इस अधिनियम के अधीन किसी विनियम का उल्लंघन करता है; (7) विनिर्दिष्ट बांधों के अन्वेषण, विन्यास या संनिर्माण के लिए उत्तरदायी व्यक्तियों की अपेक्षित अर्हताओं और अनुभव के संबंध में निदेश देना; (8) विनिर्दिष्ट बांधों के संनिर्माण के दौरान किए जाने वाले क्वालिटी नियंत्रण उपायों के संबंध में निदेश देना; (9) सन्निर्माणाधीन किसी विनिर्दिष्ट बांध के समीप भू-स्खलनों से असुरक्षित क्षेत्रों में निवारक उपायों के लिए मार्गदर्शक सिद्धांत अधिकथित करना; (10) ऐसे बांधों की भेद्यता और संकट के वर्गीकरण के आधार पर विनिर्दिष्ट बांधों के बांध सुरक्षा एककों में इंजीनियरों की सक्षमता स्तरों के संबंध में निदेश देना;
(III)	विनियमन: बांध सुरक्षा विनियम; लॉग-बुक, उपस्करों, जल-मौसम विज्ञान केन्द्रों, भूकंप-विज्ञानी स्टेशनों, जोखिम निर्धारण अध्ययन, व्यापक बांध सुरक्षा मूल्यांकन आदि का रखरखाव; संसदीय प्रश्नों से जुड़े मामले और संसद सिमिति के मामले	(1) बांध सुरक्षा मानकों को बनाए रखने और आपदा संबंधी बांध विफलताओं को रोकने के प्रयोजन के लिए ऐसे कृत्यों का निर्वहन करना, जो राष्ट्रीय समिति द्वारा बनाई गई नीतियों के कार्यान्वयन से संबंधित हैं, जिसके अंतर्गत राष्ट्रीय समिति की सिफारिशों पर विनियम बनाना भी है; (2) लाग बुक या डाटा बेस को बनाए रखने के संबंध में निदेश देना; (3) विनिर्दिष्ट बांधों में उपस्करों की आवश्यकता और उनके कार्यनिष्पादन को मानीटर करने के लिए उनके लिए प्रतिष्ठापन की

रीति के संबंध में निदेश देना ;

[भाग II—खण्ड 3(i)] भारत का राजपत्र : असाधारण 7

		 (4) विनिर्दिष्ट बांधों के आसपास जल-मौसम विज्ञान केन्द्रों की आंकड़े अपेक्षाओं के संबंध में निदेश देना; (5) विनिर्दिष्ट बांधों के आसपास भूकंप-विज्ञानी स्टेशनों के डाटा अपेक्षाओं के संबंध में निदेश देना; (6) विनिर्दिष्ट बांधों की भेद्यता और संकट वर्गीकरण के आधार पर ऐसे बांधों के जोखिम निर्धारण अध्ययनों के लिए समय अंतराल के संबंध में निदेश देना; (7) विनिर्दिष्ट बांधों के व्यापक बांध सुरक्षा मूल्यांकन के लिए विशेषज्ञों के स्वतंत्र पैनल के गठन के संबंध में निदेश देना; (8) विनिर्दिष्ट बांधों की भेद्यता और संकट वर्गीकरण के आधार पर ऐसे बांधों के व्यापक सुरक्षा मूल्यांकन के लिए समय अंतराल के संबंध में निदेश देना;
(IV)	आपदा और समुत्थान-शक्तिः राज्यों/बांध स्वामियों के बीच विवादों का समाधान; राज्यों/बांध स्वामियों को तकनीकी और प्रबंधकीय सहायता; बांध विफलताओं और अन्य सार्वजनिक सुरक्षा चिंताओं की जांच; आपातकालीन कार्य योजना, वार्षिक रिपोर्ट तैयार करना;	(1) राज्यों के राज्य बांध सुरक्षा संगठनों के बीच या किसी राज्य बांध सुरक्षा संगठन और उस राज्य में किसी विनिर्दिष्ट बांध के किसी स्वामी के बीच किसी मुद्दे का समाधान करना; (2) किसी प्रमुख बांध विफलता के कारण की, अपने स्वयं के इंजीनियरों के माध्यम से या विशेषज्ञों के पैनल के माध्यम से, जहां कहीं आवश्यक हो, जांच कराना और राष्ट्रीय समिति को उसकी रिपोर्ट प्रस्तुत करना; (3) किसी विनिर्दिष्ट बांध के संबंध में किसी प्रमुख लोक सुरक्षा चिंता के कारण का अपने स्वयं के इंजीनियरों के माध्यम से या विशेषज्ञों के पैनल के माध्यम से, जब कभी अपेक्षित हो, जांच करना तथा आगे और अन्वेषणों, प्रचालन संबंधी पैरामीटरों या उपचारात्मक उपायों के संबंध में समुचित अनुदेश जारी करना; (4) विनिर्दिष्ट बांधों की भेद्यता और संकट वर्गीकरण के आधार पर ऐसे बांधों की आपातस्थिति कार्य योजनाओं को अद्यतन करने के लिए समय अंतराल के संबंध में निदेश देना; (5) जल विज्ञान और मौसम विज्ञान और सूचना से संबंधित वास्तविक डाटा के आदान-प्रदान के लिए किसी बांध के स्वामी द्वारा जलाशयों के प्रचालन से संबंधित समुचित ढांचे को सम्मिलित करते हुए किसी आरंभिक चेतावनी प्रणाली की स्थापना करना; (6) ऐसे बांध पुनर्वास कार्यक्रमों के, जो राज्यों, केंद्रीय या बाह्य वित्तपोषण के माध्यम से निष्पादित किए जाते हैं, समन्वयन और संपूर्ण पर्यवेक्षण का उपबंध करना; (7) संसद के प्रत्येक सदन के समक्ष रखे जाने के लिए देश में बांध सुरक्षा क्रियाकलापों की वार्षिक रिपोर्ट तैयार करना;
(V)	प्रशासन और वित्त:	मानव संसाधन, वित्त, सतर्कता, कानूनी, सूचना प्रौद्योगिकी के सेवा मामलों के साथ-साथ केंद्रीय सरकार द्वारा उसको निर्दिष्ट किसी भी विषय से संबंधित सभी क्रियाकलाप ।

(3) प्राधिकरण को नीचे सूचीबद्ध रीति में राज्यों और संघ राज्यक्षेत्रों को आविष्ट करने वाले चार प्रादेशिक कार्यालयों द्वारा सहायता उपलब्ध करायी जाएगी :

क्रम सं.	प्रादेशिक कार्यालय	राज्यों/संघ राज्य क्षेत्रों का नाम		
1	उत्तरी क्षेत्र	जम्मू और कश्मीर, लद्दाख, चंडीगढ़, दिल्ली, उत्तर प्रदेश, पंजाब, हरियाणा, उत्तराखंड और हिमाचल प्रदेश।		
2	पूर्वी और पूर्वोत्तर क्षेत्र	बिहार, झारखंड, पश्चिम बंगाल, छत्तीसगढ़, ओडिशा, सिक्किम, असम, मेघालय, अरुणाचल प्रदेश, नागालैंड, मणिपुर, मिजोरम और त्रिपुरा।		

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3	पश्चिमी क्षेत्र	राजस्थान, गुजरात, मध्य प्रदेश, महाराष्ट्र, दादरा और नगर हवेली और दमण और दीव और गोवा।
4	दक्षिणी क्षेत्र	तेलंगाना, आंध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु, पुडुचेरी, लक्षद्वीप और अंडमान और निकोबार द्वीप समूह।

- (4) प्राधिकरण का मुख्यालय दिल्ली राष्ट्रीय राजधानी राज्यक्षेत्र में होगा और प्राधिकरण भारत में अन्य स्थानों पर प्रादेशिक कार्यालय स्थापित कर सकेगा । प्राधिकरण अपने कार्यों को पूरा करने के लिए समय-समय पर आवश्यक समझे जाने पर अपने प्रादेशिक कार्यालयों के अधीन क्षेत्रीय कार्यालय भी स्थापित कर सकेगा ।
- (5) प्रादेशिक कार्यालय प्राधिकरण के संपर्क कार्यालयों के रूप में कार्य करेंगे, और संबंधित राज्य बांध सुरक्षा संगठनों और विनिर्दिष्ट बांधों के स्वामियों को समन्वय सेवाएं उपलब्ध करेंगे। उत्तरी क्षेत्र कार्यालय का प्रशासनिक नियंत्रण सदस्य (नीति और अनुसंधान), सदस्य (तकनीकी) के पास पूर्वी और पूर्वोत्तर क्षेत्र के कार्यालय, सदस्य (विनियमन) के पास पश्चिमी क्षेत्र के कार्यालय और सदस्य (आपदा और समुत्थान-शक्ति) के पास दक्षिणी क्षेत्र के कार्यालय होंगे।
- (6) ऐसी दशा में जहां एक विनिर्दिष्ट बांध एक केंद्रीय सार्वजनिक क्षेत्र के उपक्रम के स्वामित्व में है या जहां एक विनिर्दिष्ट बांध दो या दो से अधिक राज्यों में फैला हुआ है, या जहां एक राज्य में विनिर्दिष्ट बांध दूसरे राज्य के स्वामित्व में है, तो प्राधिकरण राज्य बांध सुरक्षा संगठन के रूप में माना जाएगा।

4. प्राधिकरण का व्यय:-

- 1. प्राधिकरण द्वारा अपने कृत्यों के निर्वहन के लिए उपगत सभी व्यय (पूंजीगत और राजस्व व्यय) केन्द्रीय सरकार द्वारा वहन किए जाएंगे।
- प्राधिकरण के लेखों की लेखा संपरीक्षा भारत सरकार के संनियमों, के अनुसार अर्थात भारत के नियंत्रक-महालेखापरीक्षक या उनके द्वारा नामित प्रतिनिधि द्वारा की जाएगी।
- प्राधिकरण केंद्रीय सरकार द्वारा उसे सौंपे गए कृत्यों और कर्तव्यों के पूर्ण और उचित निष्पादन करने के लिए ऐसी संविदाएं और करार कर सकेगा जो वह आवश्यक और अनिवार्य समझें।

[फा. सं. एन-52011/1/2021-बीएम अनुभाग-एमओडब्ल्यूआर]

संजय अवस्थी, संयुक्त सचिव

[PART II—SEC. 3(i)]

NOTIFICATION

New Delhi, the 17th February, 2022

- G.S.R. 135(E).—In exercise of the powers conferred by clauses (b) and (c) of sub-section (2) of section 52 of the Dam Safety Act, 2021 (41 of 2021), the Central Government hereby makes the following rules, namely:
- 1. Short-title and commencement:- (1) These rules shall be called the National Dam Safety Authority (Functions and Powers) Rules, 2022.
 - (2.) They shall come into force on the date of their publication in the Official Gazette.
- 2. **Definitions:** (1) In these rules, unless the context otherwise requires:
 - a. "Act" means the Dam Safety Act, 2021 (41 of 2021);
 - b. "Authority" means the National Dam Safety Authority (NDSA) established under section 8 of the Act;
 - c. "Chairman" means the Chairman of the National Dam Safety Authority, who heads the Authority as per sub-section (2) of section 8 of the Act;
 - d. "National Committee" means the National Committee on Dam Safety constituted under section 5 of the Act:
 - e. "section" means a section of the Act.

- (2) Words and expressions used herein and not defined in these Rules but defined in the Act shall have the meanings respectively assigned to them in the Act.
- 3. Structure of the Authority: (1) The Chairman, National Dam Safety Authority shall be the head of the Authority.
 - (2.) There shall be five Members to assist the Chairman, NDSA. Each Member shall be heading one of the following five wings with the assigned functions as below:

S. No.	Wings	Functions (As assigned in the 2 nd Schedule of the Act)
(I)	Policy & Research: Secretariat of the 'National Committee on Dam Safety' and its sub-committees; formulation/revision of various guidelines, manuals, checklists, Research & Development, Public awareness and dissemination, vulnerability and hazard classification of dams etc.;	 (1) Maintain liaison with the State Dam Safety Organizations and the owners of the specified dams for standardisation of dam safety related data and practices, and related technical or managerial assistance; (2) Lay down guidelines and check-lists for the routine inspection and detailed investigation of the specified dams and appurtenant structures; (3) Lay down the uniform criteria for vulnerability and hazard classification of the specified dams in the country, and review such criteria as and when necessary; (4) Lay down guidelines for review of design floods of existing the specified dams; (5) Lay down guidelines for review of site specific seismic parameter studies of the specified dams; (6) Promote general education and awareness in respect of dam safety; (7) Provide Secretarial assistance to the National Committee and its sub-committees; (8) Any other specific matter relating to dam safety which
(77)		may be referred to it by the Central Government.
(II)	Technical: Directions on manpower, activities related to individual expert, matters related to experience and qualification of dam safety staff and official, accreditation of agencies for investigation, design, construction and quality control etc.	 (1) Provide the state-of-the-art technical and managerial assistance to the State Dam Safety Organizations; (2) Maintain a national level database of all specified dams in the country, including serious distress conditions, if any, noticed therein; (3) Maintain the records of major dam failures in the country; (4) Give directions regarding qualifications and experience requirements of individuals responsible for safety of the specified dams (5) Accord accreditations to the agencies that may be entrusted with the investigation, design, construction and alteration of the specified dams; (6) Disqualify any agency for taking up investigation, design, construction or alteration of the specified dams, if it violates any of the regulations made under this Act; (7) Give directions regarding qualification and experience requirements of individuals responsible for investigation, design and construction of the specified dams; (8) Give directions regarding quality control measures to be undertaken during construction of the specified dams; (9) Lay down guidelines for preventive measures in the areas vulnerable to landslides in the vicinity of a

		(10) Give directions regarding competent levels of engineers in the dam safety units of the specified dams on the basis of vulnerability and hazard classification of such dams;
(III)	Regulation: Dam safety regulations; maintenance of log-books, instrumentation, hydro- meteorological stations, seismological stations, risk assessment studies, comprehensive dam safety evaluation etc.; parliament questions and parliament committee matters	 (1) For the purpose of maintaining standards of dam safety and prevention of dam failure related disasters, discharge such functions as related to implementation of the policies made by the National Committee including making regulations on the recommendations of the National Committee; (2) Give direction regarding maintenance of log books and database; (3) Give directions regarding instrumentation requirements and manner of their installation for monitoring the performance of the specified dams; (4) Give directions regarding data requirements of hydrometeorological stations in the vicinity of the specified dams; (5) Give directions regarding data requirements of seismological stations in the vicinity of the specified dams; (6) Give directions regarding time interval for the risk assessment studies of the specified dams on the basis of vulnerability and hazard classification of such dams; (7) Give directions regarding constitution of independent panel of experts for comprehensive dam safety evaluation of the specified dams; (8) Give directions regarding time interval for the comprehensive safety evaluation of the specified dams on the basis of vulnerability and hazard classification of such dams.
(IV)	Disaster & Resilience: Resolution of conflicts between States/ dam owners; technical & managerial assistance to States/dam owners; investigation of dam failures and other public safety concerns; emergency action plan, preparation of annual report;	 (1) Resolve any issue between the State Dam Safety Organisations of States or between a State Dam Safety Organisations and any owner of a specified dam in that State; (2) Examine, as and when necessary, either through its own engineers or through a panel of experts, the cause of any major dam failure, and submit its report to the National Committee; (3) Examine whenever required, either through its own engineers or through a panel of experts, the cause of any major public safety concern in respect of any specified dam, and issue appropriate instructions relating to further investigations, operational parameters or remedial measures; (4) Give directions regarding time interval for updating the emergency action plans of the specified dams on the basis of vulnerability and hazard classification of such dams; (5) Establishment of an early warning system incorporating appropriate framework for the exchange of real time hydrological and meteorological data and information related to operation of reservoirs by the owner of a dam. (6) Provide coordination & overall supervision of dam rehabilitation programs that are executed in the States through central or externally aided funding.

[भाग II—खण्ड 3(i)]	भारत का राजपत्र : असाधारण	11
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		(7) Prepare Annual Report of the dam safety activities in the country to be laid before each House of Parliament.	
(V)	Administration & Finance:	All activities related to service matter of human resources, finance, vigilance, legal, Information Technology as well as any matter referred to it by the Central Government.	

(3.) Authority shall be supported with four regional offices covering States and Union Territories in below listed manner:

S. No.	Regional Office	Name of States/ Union Territories	
1	Northern Region	Jammu & Kashmir, Ladakh, Chandigarh, Delhi, Uttar Pradesh, Punjab, Haryana, Uttarakhand and Himachal Pradesh.	
2	Eastern & North Eastern Region	Bihar, Jharkhand, West Bengal, Chhattisgarh, Odisha, Sikkim, Assam, Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram and Tripura.	
3	Western Region	Rajasthan, Gujarat, Madhya Pradesh, Maharashtra, Dadra and Nagar Haveli and Daman & Diu and Goa.	
4	Southern Region	Telangana, Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Puducherry, Lakshadweep and Andaman & Nicobar Island.	

- (4.) The headquarter of the Authority shall be in the National Capital Region of Delhi and the Authority may establish regional offices at other places in India. Authority may also establish field offices under its regional offices, as felt necessary from time to time, to fulfil its functions.
- (5.) offices shall serve as liaisoning offices of the Authority, and shall provide coordination services with the respective State Dam Safety Organisations and dam owners of the specified dams. The administrative control of the Northern Region office shall be with Member (Policy & Research), Eastern & North Eastern Region office with Member (Technical), Western Region office with Member (Regulation) and Southern Region office with Member (Disaster & Resilience).
- (6.) In case where a specified dam is owned by a Central Public Sector Undertaking or where a specified dam is extended over two or more States, or where the specified dam in one State is owned by another State, then the Authority shall be construed as the State Dam Safety Organisation.
- **4. Expenditure of the Authority:** (1) All expenses (capital and revenue expenditure) incurred by the Authority for discharging of its functions, shall be borne by the Central Government.
 - (2.) The accounts of the Authority shall be audited as per Government of India norms i.e. by the Comptroller and Auditor General of India or his nominee.
 - (3.) The Authority shall enter into such contracts and agreements as may be necessary and essential for the full and proper performance of the functions and duties assigned to it by the Central Government.

[F. No.N-52011/1/2021-BM Section-MOWR] SANJAY AWASTHI, Jt. Secy.

Agenda Item 1.1.3 Establishment of National Dam Safety Authority

Annexure 1.5

No.N-52011/2/2021-BM/PR
Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Peninsular Rivers Wing

Room No.357-A, Krishi Bhawan, New Delhi, dated 25th April, 2022

OFFICE MEMORANDUM

Subject: Establishment of the National Dam Safety Authority-reg.

I am directed to convey that in pursuance of Office Memorandum issued for the establishment of the National Dam Safety Authority (NDSA) under the relevant provision of the Dam Safety Act 2021 (Section 8 thereon), the Chairman and the Members of NDSA have assumed charge on additional basis. The composition of NDSA is as under:

SI. No.	Name & Designation	Additional Charge of NDSA	Office Phone No.
1	Sh. J Chandrashekhar Iyer Member (D&R), Central Water Commission	Chairman	011-20861755
2	Sh. Gulshan Raj Chief Engineer (DSO), Central Water Commission	Member- Policy & Research	011-26106848
3	Sh. S.K. Sibal Chief Engineer, Designs (N&W), Central Water Commission	Member- Technical	011-26100806
4	Sh. S.K. Sibal Chief Engineer, Designs (NW&S), Central Water Commission (Addl Charge)	Member- Disaster & Resilience	011-26102420
5	Sh. Vijay Saran Chief Engineer, Designs (E&NE), Central Water Commission	Member- Regulation	011- 26104083
6	Ms. Richa Misra Joint Secretary & Financial Advisor, DoWR, RD&GR	Member- Administration & Finance	011-23710297

2. NDSA shall be supported with four regional offices. Details of CWC field offices/officers which have been assigned the additional charge of four regional offices of NDSA are given as under:

S.	Regional	Name of States/UTs under	Proposed CWC Officers	
No.		their jurisdiction		
1	Northern Region	Ladakh, Chandigarh, Delhi, Uttar Pradesh, Punjab, Haryana, Uttarakhand and		
2	Eastern & North-Eastern Region	Odisha, Sikkim, Assam,	Director (M&A), Brahmaputra Basin Organisation, CWC Complex, 2 nd Floor, P O Guwahati University, Guwahati	
3	Western Region	Madhya Pradesh,	, Sh. Umbarje Harish Girish , Director (M&A), Monitoring Central d'Organisation, NWA, Sinhagad Road,	
4	Southern Region	Pradesh, Karnataka, Kerala, Tamil Nadu,	Sh. R. Thangmani Director (Mon) Cauvery & Southern Rivers Organisation, Neervalam, R-81, TNHB Colony, West Velacherry,	

3. The Secretariat of National Dam Safety Authority shall be as follows:

Dam Safety Design-II Directorate, Room No. 411, 4th Floor, Sewa Bhawan, R.K. Puram, New Delhi – 110 066

Telephone No.: 011-29583736; Email: dsd2dte-cwc@gov.in

(Contact officer- Sh. O.P Gupta, Director, O/o Chairman, NDSA)

All correspondence to the Chairman, NDSA may be addressed to the above Secretariat.

Manoj Kumar)

Sr. Joint Commissioner (PR) E-mail: cadwmcentral-mowr@nic.in

Tel. No. 011-23388020

To,

- 1. Chief Secretary of all State Governments (as per list enclosed)
- 2. Secretary, Ministry of Power, Government of India
- 3. CMD of Central Public Sector Undertakings & CMD of Private Dams (as per list enclosed)
- 4. Member Secretary, National Disaster Management Authority, New Delhi

Copy to

- 1. Engineer-in-Chief/Chief Engineer, Water Resources Department/Irrigation Department of all State Governments (as per list enclosed)
- 2. Chairman and Members of NDSA
- 3. Chief Engineers of Regional Offices of Central Water Commission

Copy for information to:

- 1. PS to Hon'ble Minister (Jal Shakti)
- 2. PS to Hon'ble Minister of State (Jal Shakti)
- 3. PPS to Secretary (WR, RD & GR)
- 4. PPS to Secretary, Ministry of Environment, Forest & Climate Change
- 5. PPS to Chairman, Central Water Commission, New Delhi
- 6. PPS to Additional Secretary (WR, RD & GR)
- 7. PPS to Chairman, Central Electricity Authority, New Delhi
- 8. PPS to Joint Secretary(A, IC & GW)
- 9. PPS to Joint Secretary(RD & PP)
- 10. Director General, Geological Survey of India, Kolkata
- 11. Director General, India Meteorological Department, New Delhi
- 12. Director, National Remote Sensing Centre, Hyderabad
- 13. Director, National Geophysical Research Institute, Hyderabad
- 14. Other members of the National Committee on Dam Safety
- 15. All Wings/Organizations / Divisions under DoWR, RD&GR
- NIC Cell, DoWR, RD & GR- with request to upload the same on Intra-net of the Ministry

Agenda Item 1.1.6

Formulation of Rules/Regulations under Section 54 of Dam Safety Act, 2021

Annexure 1.6

भारत सरकार जल शक्ति मंत्रालय जल संसाधन नदी विकास एवं गंगा संरक्षण विभाग केन्द्रीय जल आयोग बांध सुरक्षा अभिकल्प-॥ निदेशालय



Government of India Ministry of Jal Shakti Dept. of Water Resources, RD&GR Central Water Commission Dam Safety Design-II Directorate

Dam Safety Design-II Direct

dated 12-05-92

No. CWC/DSD-II/1-4/2022/62-79

OFFICE MEMORANDUM

Sub: Constitution of Sub-Committee for framing the draft Rules/Regulations under Section 54 of Dam Safety Act, 2021 – reg.

I am directed to convey the approval of competent authority for constitution of a Sub-Committee for framing the draft Rules/Regulations as specified under Section 54 of Dam Safety Act, 2021. The composition of the Sub-Committee is as follows:

1	Sh Gulshan Raj, Chief Engineer (DSO), CWC & Member (Policy &	Chairman
	Research), NDSA	CHAITHAI
2	Sh Vivek Tripathi, Director CMDD (E&NE), CWC	Member
3.	Sh N N Rai, Director Hydrology (South), CWC	Member
4.	Sh. S S Bakshi, Director (DSM), CWC	Member
5.	Sh Pramod Narayan, Director (DSR), CWC	Member
6.	Sh Shiv Kumar Sharma, Director BCD (N&W), CWC	Member
7	Sh Samir Kumar Shukla, Director (FE&SA), CWC	Member
8	Sh Rahul Kumar Singh, Director Gates (NW&S), CWC	Member
9	Sh Manoj, Kumar, SJC (PR Wing), DoWR, RD&GR	Member
10	Sh O P Gupta, Director (Instrumentation), CWC	Member- Secretary

Terms of Reference:

To frame draft Rules/regulations as specified under Section 54 of Dam Safety Act 2021 and submission within 60 days from the date of issue of this OM.

Director, DSD-II Dte

To:

- Sh Gulshan Raj, Chief Engineer (DSO), CWC& Member (Policy & Research), NDSA
- 2 Sh Vivek Tripathi, Director, CMDD (E&NE), CWC
- 3. Sh N N Rai, Director, Hydrology (South), CWC
- 4. Sh Pramod Narayan, Director (DSR), CWC
- 5. Sh. S S Bakshi, Director (DSM), CWC
- 6. Sh Shiv Kumar Sharma, Director BCD (N&W), CWC
- 7 Sh Samir Kumar Shukla, Director (FE&SA), CWC
- 8 Sh Rahul Kumar Singh, Director Gates (NW&S), CWC
- 9 Sh Manoj, Kumar, SJC (PR Wing), DoWR, RD&GR
- 10 Sh O P Gupta, Director (Instrumentation), CWC

Copy for kind information to:

- 1. PPS to Secretary, DoWR, RD & GR
- 2. PPS to Chairman, Central Water Commission and Chairman, NCDS
- 3. PPS to Member (D&R), CWC and Chairman, NDSA
- 4. PPS to Joint Secretary (RD & PP), DoWR, RD&GR
- 5. All Members of NDSA

चतुर्थ तल (दक्षिण),सेवाभवन, राम कृष्ण पुरम नई दिल्ली-110066 दूरभाष:011-29583736 ईमेल: dsd2dte-cwc@gov.in ♦जल संरक्षण- सुरक्षित भविष्य♦♦



4th Floor(South), Sewa Bhawan, R.K. Puram, New Delhi -110066 Tel: 011-29583736 E-mail: dsd2dte-cwc@gov.in Conserve Water- Save Life

Agenda Item 1.2.1

Technical Documentation - National Registry of Specified Dams

Annexure 1.7

SALIENT INFORMATION OF EACH SPECIFIED DAM under the jurisdiction of each State Dam Safety Organization

The following *Salient Information* shall be provided in *HARD COPY* and *SOFT COPY* by each *State Dam Safety Organization* on each specified dam under its jurisdiction:

S.No.	Information		
1 Name of the State or UT in which the Dam in Located			
2	Name of the Dam		
3	Full Address of the Dam		
	Latitude:ºN Longitude:	oE	
4	Name of the Dam Owner		
5	Full Address of the Dam Owner		
6	Commissioning of the Dam		
	Date of Commissioning of the Dam	:	
7	Material with which the Dam was Constructed		
8	Salient Features of the Dam		
	Height (m) (above deepest foundation level)	:	
	<i>Length of the crest (m)</i>	:	
	Bottom width (m)	:	
	Top width (m)	:	
	Capacity of the reservoir (in m³)		
	(a) Active Storage	:	
	(b) Dead Storage	:	
	Max Flood Discharge (in m³)		
	(a) Design Flood	:	
	(b) Observed Flood	:	
	Specially difficult Foundation problems	: Yes or No	
	Unusual Dam Design	: Yes or No	
9	Inspection Galleries in the Dam		
	Number	:	
	Elevation of Galleries (m)	:	
	Are all Galleries Dru?	: Yes or No	

10	Gates			
	Method of Operation of Gates	: Hydraulic or Electric		
	Size of each Gate	:		
	Number of Gates	:		
	Number of Gates in working condition	:		
11	Operation &Maintenance Manual	: Yes or No		
	Was an Operation & Maintenance Manual prepared?	: Yes or No		
	If No , by when is the same likely to be prepared?			
12	Silting of Reservoir			
	Does the Reservoir get silted?	: Yes or No		
	If Yes , what percentage of the reservoir capacity is lost?	:		
13	Leakage through the Dam Body			
	Peak Water leakage (in m³)	:		
14	Structural Safety Assessment			
	Was Structural Safety Assessment performed?	: Yes or No		
	If Yes , was the Dam found to be safe?	: Yes or No		
	If No , was the Dam retrofitted?	: Yes or No		
	If Yes , when was it retrofitted?	:		
	If Yes , what was the retrofit measure adopted?	:		
15	Dam Break Analysis			
	Was Dam Break Analysis performed?	: Yes or No		
	If YES, were Disaster Management Plans prepared?	: Yes or No		
16	Emergency Action Plan			
	Was an Emergency Action Plan prepared?	: Yes or No		
	If Yes, was it shared with the SDMA and DDMA?	: Yes or No		

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