



REPUBLIKA E SHQIPËRISË KOMITETI KOMBËTAR I DIGAVE TË MËDHA

KKDM/Nr. Prot Lutemi referoni këtë numër në përgjigje Tirana, 19.10.2020

GENERAL GUIDELINE

ON

"Preparation of Technical Rules for Operation, Maintenance and Control of Dams and their main elements"

The Technical Regulations for the Use, Maintenance and Control of Large Dams must be drawn up based on the requirements of Law 8681, dated 02.11.2000 "On the Design, Construction, Operation and Maintenance of Dams", Decision of the Council of Ministers No. 147, dt. 18.03.2004, "Regulation for Safety of Dams and Dams", article 9 and 29, Instruction No. 4, dt. 18.07.2003 "Requirements for legal and technical documentation that must be contained in the file of dams and dams", KKDM Decision No. 3, dated 19.10.2020 as well as the Recommendations of ICOLD.

The Main Elements of the Dam for which this Regulation should serve are:

- The body of the Dam including the slopes, drainages, crown of the dam as well as the elements of its impermeability according to the type and type of these elements
- Download System
- ➢ Water intake system
- Diversion system
- Emptying system

This regulation should also include the Rules for the Investigation of the reservoirs created by the dam and its Banks.

The technical regulation of the use, monitoring and control of the Dam Facilities and sub-facilities must be prepared by the Dam Engineer and be approved in writing by the Institution that administers the Dam or the user of the Dam.

This Regulation must state all the duties and actions of the Dam Engineer and the dam's safety team/its technical unit in relation to the use, maintenance and control of all facilities and sub-facilities that make up the Dam according to Article 3 of VKM No. 147, dt. 18.03.2004

The Rules must contain at least information about:

1) **Technical File/Dam Passport** which must be completed according to the Directive of the Council of Ministers, No. 4, dt. 18.07.2003 "Requirements for legal and technical documentation that must be contained in the file of dams and dams" and Decision of KKDM, No. 2, date 21.09.2020.





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2) The rules of dam monitoring where:

- Description of the visual monitoring process
- Technical description of the existing dam monitoring systems (Geodesic, Seismic, Hydrotechnical, Geological Engineering, Hydrometeorological monitoring, etc.) giving also the type and number of instruments of the Monitoring Systems;
- > Graph of the frequency of the respective monitoring mentioned above;
- ➤ The reports determined according to the legislation in normal cases as well as in cases of special events for the relevant Institutions from which they depend as well as for KKDM.

3) The **rules for the Tests** that must be carried out at the Discharge Systems before the start of each rainy season. This Regulation should also include general information regarding the Operation and Maintenance Manuals of the installed electromechanical equipment as well as the monitoring systems.

4) The **rules of discharge of large flows for dams used for hydropower and water supply**. This Regulation should also include data regarding the maximum and minimum Levels and Flows determined by the Designer as well as those observed in the last 10 years.

5) The **rules of the use of the catchment for the dams used for irrigation** as well as the maximum and minimum levels of water in the catchment in the high water period October - May and the low water period June - September. This Regulation should also include data regarding the maximum and minimum Levels and Flows determined by the Designer as well as those observed in the last 10 years

6) **Data for the Dam Safety Group/ Technical Management Unit** which must be composed of specialists in the field in accordance with the requirements of Article 5 of VKM No. 147, dt. 18.03.2003. In the Regulation, the organizational structure and the related tasks of the Group/Unit are given, as well as the data for the Dam Engineer, the contact and communication persons in the event of events that may occur.

1) **Preparedness plan in case of Civil emergencies**, including the system of evacuation of people and quick assistance in case of special events. In this Plan, the data for the Alarm, signaling and communication system in the area, the data for the Plan of the access roads to the facilities and sub-facilities of the Dam defined above, as well as the Sources of electricity supply in case of defects and events must be given. defined in the scenarios of the emergency plan

2) The form of the Register of Use, which should include data related to observations, surveys, measurements, data processing and their interpretations. In the Register, the events during the use of the facility and the catchment, the data of the maneuvering of the gates, the checks on the parts of the dam, the incidents found during the use (filtrations, water flow, cracks, etc.), hydrometeorological events (flows and maximum levels for each month), data on the events related to seismic shaking and their consequences, maintenance and repair work carried out in the facility, etc.

On the behalf of

ALBANIAN NATIONAL COMMITTEE ON LARGE DAMS

CHAIRMAN

Arjan JOVANI