



Form 1

Passport of the Dam

I- GENERAL:

| Name of Dam: | | | |
|--|---|--|--|
| Name of the River/ Stream which the Dam has access to: | | | |
| Name of the Beneficiaries of the Dam: | | | |
| Name of the Designer of the Dam (Institute): | | | |
| Main Purpose of Dams usage: | | | |
| Auxiliary purpose of Dams usage: | | | |
| Territory of the municipality where the dam is located: | | | |
| Territory of the district where the dam is located: | | | |
| Territory of the district where the reservoir is located: | | | |
| The way the Reservoir is Filled: (with main river / stream flow, other streams, feed channel, etc.) | | | |
| Authors of supporting studies (name of company or principal): | | | |
| Geological and Geotechnical studies: Seismic: Hydrogeologic studies Hydrological Studies: Construction Material: | | | |
| Coordinate N of the middle of the Dam Crest: | N | | |
| Coordinate E of the middle of the Dam Crest: | E | | |
| Coordinate Z of the middle of the Dam Srest: | Z | | |
| Dam Class referred Risk assessment: | | | |
| Number of People and land at Risk in Case of Dam failure: | | | |





II- GENERAL TECHNICAL DATA OF THE DAM BODY

| Dams Height (according to recommendations of ICOLD) in (m): | Н |
|---|---|
| Length of Dams Crest in (m): | L |
| Level of Dams Crest in absolute quote (mmnd): | |
| Width of Dams Crest in (m): | |
| Total Volume of Dams body m3: | V |
| Width of Dams body in the basement: | В |
| Slope of Upper side of Dams: | |
| Slope of Down side of Dams: | |
| Type of impermeability element of the Dam: | |
| Width of Impermbeality element in the Dams Basement: | |
| Width of Impermeability element in the Dams Crest: | |
| Maximal Level of Impermeability element on the Dam: | |
| Geological Basement under the Dam: | |
| Dam Crest level upon the Maximal water level: | |
| Year for the Start of the Dam Constructions: | |
| Year for the finish of the Dam Constructions: | |
| Year that the Reservoir was first filled: | |
| Year that it was first put to work: | |
| Year of the last Empty of the Reservoir (if it happened): | |
| Date of the caused Incidents: (if there were incidents, if yes explain and say the date) | |
| Period and Nature of Major Repairs performed: | |





III. <u>GENERAL TECHNICAL DATA OF DISCHARGE SYSTEMS, INTAKE & DEVIATIONS SYSTEMS</u>

| III.1 – Disch | arge Systems, | / Spillways |
|---------------|---------------|-------------|
|---------------|---------------|-------------|

| Type of Discharge Systems: (Tunnel, free gutter, side gutter, surface gate, wells) | |
|---|-----|
| Number of Spillway's: | N |
| Total Capacity of Spillways: | Qsh |
| Dimensions in the entrance of Spillway: | |
| Water intake threshold level at the discharge system in mmnd: | |
| Flow Accelerator Length and Width: | |
| Location of the Spillways System: | |
| III.2 – Water Intake Systems | |
| Type of Water Intake Systems: | |
| Total water intake capacity: | Qvm |
| Dimensions in the entrance of the Water intake System: | |
| Water intake threshold level at the Intake Structure in mmnd: | |
| III.3 – Water Drainage Systems | |
| Type of Water Drainage Systems: | |
| Number of Water Drainage: | |
| Maximum Flow / Total Capacity of Water Drainage System: | Qz |
| Dimensions at the entrance of the Water Drainage System: | |
| | |

III.4 – Deviation System

Type of Deviation System:





IV- General Data for the Reservoir

| The surface of the water in the Reservoir at the maximum level in m2: | | |
|---|-------------------|--|
| Surface of water in the Reservoir at Operation normal level: (In this case, give the time of performing bathymetry measurements and the cu | rve S = f (H) | |
| Total volume of water according to the project at the maximum level: (In this case, give the curve $V = f(H)$) | | |
| Total volume of water measured in the Reservoir at the maximum allowed level: | | |
| Useful volume of water according to the project at the maximum level: | | |
| Useful volume of water according to the project at the minimum allowed level: | | |
| Dead Water volume of Reservoir: | | |
| Dead volume filling time: | | |
| Maximum level for normal use during operation: | | |
| Maximum water level allowed for maximum inflow once in 10,000 years: | | |
| Minimum designed level of Reservoir during Operation: | | |
| Minimum water level recorded since the starting of operation: | | |
| Maximum water level recorded since the starting of operation: | | |
| Average annual foreseen flow: | | |
| Average annual flow for the last 10 years of operation until 2020: | | |
| | | |

Note: attached to this section of Form 1, provide the relevant graphs:

- a- V=f(H)
- b- S=f(H)



V. GENERAL INFORMATION ON CLIMATE AND HYDROLOGICAL CONDITIONS

| | Catchment Surface Area: | |
|-----|---|-----------------------|
| | Average annual rainfall: | |
| | Minimum temperature recorded in the axis area of the l | Dam: |
| | Maximum temperature recorded in the axis area of the | Dam: |
| | Average river / stream flow in the axis of the Dam in m | n3 / sec: |
| | Maximum river / stream flow in the axis of the Dam in | m3 / sec, measured: |
| | Date / month / Year of maximum measured flow: | |
| | Five Maximum Historical Flows measured during the c | operation of the Dam: |
| (in | this case give the year and the amount of metered feeds |) |

VI. GENERAL DATA ON THE SEISMIC CONDITIONS OF THE AREA

| Seismicity of the Area: | |
|--|----------|
| Seismic Risk Assessment of the Area: | |
| Largest earthquakes recorded in an area till 100 km from the axis of | the Dam: |
| a- Intensity: | |

b- Power:

VII. GENERAL INFORMATION ABOUT THE GEOLOGICAL AND GEOTECHNICAL CONDITIONS OF THE AREA

| Geological construction of the dam location: | |
|--|--|
| Hydrogeological conditions of the area: | |
| Geomorphological conditions of the area on the dam location: | |
| Slope stability conditions: | |
| Geological and geomorphological map of the area: | |
| Planimetry of installation of equipment for dam monitoring: | |





V- <u>TECHNICAL DRAWINGS</u>

a- Dam Body:

- General layout of the Dam together with the discharge and water intake systems
- Longitudinal section of the Dam
- Cross section in the middle of the dam

b- Drainage System:

- General Layout of the Drainage System
- Longitudinal section of the Drainage System
- Cross section of the Drainage System
- Front View of the Drainage System Entry
- Drainage System Exit Front View

c- Water Intake System

- General layout of the Water intake system (Location of the intake structure)
- Longitudinal Section
- Cross Sections



b.

c.

d.

e.



VIII. DATA ON THE MONITORING SYSTEMS (IF THEY ARE INSTALLED)

a. Data for the Geodetic Monitoring System:

| • | Number of Concrete Monuments: | | |
|---------|---|----------|----|
| • | Number of Geodetic Reference Points: | | |
| • | Number of Geodetic Levelling Points: | | |
| • | Number of Pillars: | | |
| • | Number of Geodetic Strengths: | | |
| • | Layout of equipment location of the geodetic monitoring system | n: | |
| Data fo | or the Seismic Monitoring System: | | |
| • | Number of Seismographs / Accelerometers: | | |
| • | Registered data of recorded seismic events: | | |
| • | Layout of seismic monitoring system equipment: | | |
| Data fo | or the Hydrometeorological Monitoring System: | | |
| • | Number of Hydrometric Stations for measurement of water leve | els: | |
| • | Number of Meteorological Stations: | | |
| • | Planimetry of instruments location of the Hydrological monitoring | ng syste | m: |
| Data f | or the Groundwater and Surface Water Monitoring System: | | |
| • | Number of Piezometers: | | |
| • | Number of Garages: | | |
| • | Other equipment for measuring groundwater and surface water as fibre for measuring filtration in the body of the dam by record temperature along the cable, etc.: | - | |
| • | Total amount of infiltration water in the last year of measureme | nt: | |
| • | Layout of equipment location of the ground water monitoring sy | /stem: | |
| Data f | or the Landslide Monitoring System (if any): | | • |
| • | Number of Inclinometers: | | |
| ٠ | Number of Joint meters: | | |
| ٠ | Number of tilt meters: | | |
| • | Number of extensometers: | | |
| ٠ | Number and type of piezometers for measuring water levels (if a | any): | |
| ٠ | Layout of Landslide Monitoring Instruments: | - | |
| • | Volume of the landslide Massive: | | |



IX. RECENT PHOTOS OF THE DAM AND IT'S SYSTEM

• Photo of the Dam (In the front):

• Photo from the Dam Crest

• Photos of the Upper Side of the Dam





• Photos of the Down Side of the Dam

• Photo of the Spillway system and it's location on the Dam

• Photo of the Intake Structure of the Dam's system

• Photo from the Dam's Crest of the Reservoir





X. SUMMARY OF SUPPORT STUDIES (If any)

• Geological / Geotechnical / Geological-Engineering Report Summary (no more than 3 pages)

• Seismic Report / Study Summary (not more than 2 pages)

• Summary of the Hydrological Report / Study (not more than 2 pages)

• Hydraulic Report Summary (no more than 2 pages)

• Summary of the Report / Study on Construction Materials (Not more than 2 pages)

For the Dam Engineer

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