

Professional Requirements - Jean-Pierre Tournier



Professional Requirements

Controlling the water during dam construction or rehabilitation, to provide working areas free from water and safe from river floods, is essential and extremely important in term of safety, risks, feasibility and costs.

Water Management is an important part of the overall project and must have responsibility clearly established with professional requirements of high level.

Water Management Approach

- **Part and People**

- First a clearly establishment of risks and responsibilities
- Select responsible party : owner, contractor, engineer or sharing
- Assign responsibilities and identify staff

- **Work**

- Develop data set for design and construction – cooperation between all parties, particularly engineer and contractor
- Perform analyses – highly qualified personnel
- Select alternatives – layout, materials, schedule
- Design concept – Develop plan, working drawings, calculations
- Submit for review and revision/concurrence – by qualified personnel
- Implement designed water management plan – oversight

Qualifications of Water Management Designers

- Engineers, scientists, construction leader
- Experienced in data gathering, analyses, concept development
- Understand potential exposure and risk
- Experienced in equivalent projects (type and size)
- Knowledgeable of project details
- Knowledgeable of project schedule
- Recognized by certification or reputation as qualified

Qualification of WM reviewers

- Experienced in construction practices
- Experienced in equivalent realization (size and types of design)
- Knowledgeable of project details
- Knowledgeable of project schedule
- Recognized as qualified by certification or reputation
- Sufficiently confident to express opinions

Construction Responsibilities

- **Owner**
 - Ensures that all the risks are clearly addressed and covered by the different Contracts
 - Ensures Contract terms and conditions are adequate
 - Monitors and approves project progress in accordance with plan
- **Contractor**
 - Implements WM scheme in accordance with plan
 - Makes adjusts as needed due to construction progress
 - Obtains the approval from the Engineer and the Owner for changes or adjusts before processing
 - Informs immediately of unforeseen conditions and schedule changes
- **Engineer**
 - Observes that contractor follows plan
 - Understands and approves construction changes
 - Reports construction changes and progress