



Technical Committee P on CMD WORKSHOP

Bulletin Cemented Soil Dams Conclusions and Perspectives

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CSD Bulletin: A milestone for hydraulic works

- Is based on a widely proven technique in the field of transportation infrastructures
- Gathers examples of applications in the field of hydraulic structures
- Provides a better knowledge of the performance of treated soils
- Proposes designs of structures taking into account the performance of treated soils ($H < 30$ m for the moment)



CSD Bulletin: significant benefits

- Better use of local resources
- Improvement of the mechanical performance of natural soils allowing to reduce the volume of the works and to compensate the additional costs due to the treatment, even to reduce the cost of certain works
- Increase of the resistance to internal and external erosion allowing to optimize the design of the structures



CSD Bulletin: interesting properties for the safety of structures

- Fight against 2 major causes of earthworks failure: internal erosion and overflow
 - Resistance to internal erosion: erodible soils, dispersive soils, etc.
 - Resistance to overtopping:
 - First convincing results
 - Expanding the field of knowledge by continuing full-scale tests and REX



CSD Bulletin: Promising Perspectives

- Achievements in the field of dikes and small dams where this technique is particularly well adapted
- Emerging technique that will progress as the projects are completed, for example:
 - « Submersible dams »: acceptable spilling over the crest (major part or whole length) and anticipated at design stage
 - to reduce the freeboard
 - to optimize cost, safety and storage for low dams.



Next work of Committee P

- Finalization of the Hardfill/CSG/CSGR bulletin.
- And probably other bulletins to come...

