



South African National  
Committee on Large Dams



UNIVERSITEIT·STELLENBOSCH·UNIVERSITY  
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Half day Workshop on

## THE REVISION OF THE SANCOLD INTERIM GUIDELINES ON FREEBOARD FOR DAMS

Thursday 12 March 2009

Venue: STIAS, University of Stellenbosch, Stellenbosch, SOUTH AFRICA

### PRELIMINARY PROGRAMME

12-Mar-09	Duration	Thursday		
8:00 to 8:30	min	Registration		
8:30 to 8:35	5	Workshop on Revision of SANCOLD Guidelines on Freeboard for dams: Background of WRC project	Prof Gerrit Basson	Univ of Stellenbosch
8:35 to 9:15	40	Literature Review of Freeboard guidelines and wind wave freeboard requirements	Eddie Bosman	Univ of Stellenbosch
9:15 to 9:45	30	Analytical methods to determine wind wave height and freeboard	Janus Basson	Univ of Stellenbosch/BKS
9:45 to 10:15	30	Tea		
10:15 to 10:45	30	Mathematical model calculation of wind wave heights using SWAN	Tente Tente	Univ of Stellenbosch/TCTA
10:45 to 11:30	45	Hydrodynamic model simulation of unsteady flow in reservoirs: oscillations, setup, seiches	Christiaan Visser	Univ of Stellenbosch
11:30 to 12:15	45	Risk based approach based on UK study DEFRA to combine Freeboard components for dams	Gert Cloete/Prof Johan Retief	Univ of Stellenbosch/ NAMWATER
12:15 to 13:00	45	Discussion & Conclusion	Prof Gerrit Basson	Univ of Stellenbosch

Note: CPD commenced in January 2006 whereby all professional engineering persons are required to obtain 25 credits over a 5 year cycle, with a minimum of 3 credits per year, for renewal of registration with ECSA from 2007. This course is a Category 1 activity and offers 0.5 credits. A maximum of 4 credits may be accumulated under this category per year. For more details see [www.ecsa.co.za](http://www.ecsa.co.za)

#### SCOPE

This 0.5 day workshop on Thursday 12 March 2009 on the Revision of the SANCOLD Interim Guidelines on Freeboard for Dams forms part of a SA Water Research Commission Project to review and revise the SANCOLD freeboard guidelines. The workshop will discuss a literature review with international trends, case studies on analytical and mathematical models to calculate wind wave freeboard requirements, and hydrodynamic modelling of unsteady flow conditions in a reservoir such as setup and seiches. In addition the possible combination of the freeboard components using a risk analysis methodology will be discussed.

The workshop forms part of a short course on the Design of Hydraulic Structures by the University of Stellenbosch: Monday 9 to Thursday 11 March 2009. The course: Design of Hydraulic Structures, has been structured to address planning, design and construction aspects of the hydraulic design of dams, spillways and energy dissipation structures, river abstraction works, irrigation canals, water transfer tunnels, flow gauging weirs, etc. The course includes a visit to the University of Stellenbosch Hydraulics Laboratory and to the Berg River Dam, Supplement Scheme and river flow gauging weirs. Several case studies currently under construction will be presented such as the Ingula Hydropower Project of Eskom, the De Hoop Dam by DWAF and Berg River Dam Project (TCTA & DWAF). The final day of the course will be in the form of a workshop which aims to revise the SANCOLD Guidelines on Freeboard for Dams. Presenters are drawn from government, universities, consulting engineering companies and industry. This popular course was last presented in 2007. Related courses for 2009 could be viewed at [www.civeng.sun.ac.za](http://www.civeng.sun.ac.za)

**REGISTRATION FORM – Workshop on revision of SANCOLD Dam Freeboard Guidelines 2009**

Kindly complete this registration form and fax it to **fax number +27-21 4130447** or mail the form to:  
**The Secretary, Institute for Water and Environmental Engineering, Department of Civil Engineering, University of Stellenbosch, Workshop on Revision of SANCOLD Dam Freeboard Guidelines, Private Bag X1, MATIELAND, 7602, SOUTH AFRICA.** Or by email to: **msb@aspt.co.za**  
 On receipt of the completed registration form, an invoice will be faxed or emailed to participants within 3 working days. Payment can be made electronically (details will be provided on the invoice) or by cheque, to be made payable to **University of Stellenbosch.**

**CLOSING DATE FOR REGISTRATION AND PAYMENT: 26 February 2009**

Title		Surname		Name	
Company					
	VAT registration number:		Business registration number		
	Postal address:		Street address:		
Tel	(    )		Fax	(    )	
Email			Delegate (R500)	Y/N	
Special dietary requests			Presenter (free)	Y/N	
Name/Email of person regarding payment			Student (US free)	Y/N	
			WRC Reference group (free attendance)	Y/N	
			SANCOLD Member (R400)	Y/N	

**FEES: R500-00 for 0.5 days** (Includes tea, notes & presentations); SANCOLD members R400.

**The fee for late registration after 26 February 2009 will be 20 % more than the above fees.**

Cancellations will be accepted in writing and without penalty, up to 10 working days prior to commencement of the workshop. Participants cancelling in writing less than 10 working days prior to commencement of the workshop will be liable for a 50% cancellation fee. Following registration without attendance and without written cancellation, delegates will be held responsible for the full workshop cost.

I HAVE READ AND AGREE TO THE CONDITIONS OF REGISTRATION AS STIPULATED ABOVE

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Enquiries can be directed to:**

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