

Short Course

NAME OF SHORT COURSE:	Geomorphic Approach to Landform Design and Closure Drainage
DATE:	Sunday, September 18, 2011
TIME:	8:30 am – 4:30 pm
LOCATION:	Fairmont Chateau Lake Louise / Plains of Six Room
REGISTRATION FEE:	\$500 (CDN)
FACILITATED BY:	<i>Anil Beersing, Les Sawatsky, Mike Bender, Murray Fitch and Hugh Jones</i>
LANGUAGE:	English

SHORT COURSE DESCRIPTION:	
THE WORKSHOP WILL CONSIST OF 8 MODULES:	
Module 1	The Case for Replicating Natural Landscape
Module 2	Comparing Traditional and Geomorphic Design Methodologies
Module 3	Basic Principles on Geomorphology
Module 4	Landform Design by the Geomorphic Approach
Module 5	Vegetated Water Course Design by the Geomorphic Approach
Module 6	Alluvial Channel Design by the Geomorphic Approach
Module 7	Temporary Erosion Protection of New Channels
Module 8	Case Histories

SHORT COURSE OBJECTIVES:
The end-goal of mine-disturbed land reclamation is to recreate physically sustainable and biologically productive landforms. There are two fundamentally different approaches to designing the reclaimed landscape: the conventional structural approach and the geomorphic approach. Both can be used to achieve the reclamation goals; the geomorphic approach is more effective for mostly maintenance-free systems over the long-term. This short course will provide participants with the concepts and tools for designing landforms and flow conveyances as part of mine reclamation and closure plans based on the geomorphic approach.

TARGET AUDIENCE: (IE. WHO SHOULD ATTEND)
<ul style="list-style-type: none"> • Mine Reclamation and Closure Specialists • Mine Planners • Geomorphologists

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ABOUT THE FACILITATORS:

Anil Beersing is a hydrologist with experience in the design of landforms based on the geomorphic approach for mine reclamation projects in North America.

Les Sawatsky has conducted extensive applied research in replicating natural analogues. He has applied the geomorphic approach to landscape design for coal mines and oil sands mines in North America. He has presented a number of short courses on erosion control for mine water management projects.

Mike Bender is a senior water resource engineer with experience in river engineering, erosion control including bio-engineering specifications for short- and long-term sediment control, mine water management and mine closure planning. He has developed guidelines for the design of vegetated waterways.

Murray Fitch is a senior water resources engineer with experience in the application of the geomorphic approach to landscape and channel design for oil sands mines in North America.

Hugh Jones has been actively involved in mine environmental matters for 35 years. He has developed and implemented the current Western Australian system of surety, instigated the environmental inspections system and oversaw the development of Government guidelines on environmental management for mines and tailings storage facilities. Hugh has developed numerous mine closure plans and closure risk assessments for iron ore, gold, coal and base metal operations in Australia and overseas. He has published several papers on a wide range of environmental aspects of mining, most recently concentrating on mine landform requirements at closure and the financial surety aspects of the closure process.

EQUIPMENT REQUIRED: (IE. LAPTOP)

None

MATERIALS PROVIDED: (IE. COPIES OF PPT PRESENTATION, COURSE BINDER)

Hard-Copy and E-copy of Presentations