

MINE BACKFILL WORKSHOP

February 7-9, 2023 — NIOSH Laboratory, Spokane, WA

Workshop Overview

In today's tough economic climate, mine backfills play an increasing role in sustaining the viability of mining operations worldwide. Beyond the traditional roles of maximizing resource extraction, improving safety, and increasing productivity in otherwise difficult deposits, there is increasing pressure from local stakeholders and communities to reduce surface impacts and even eliminate surface tailings impoundments. Hence even high cost alternatives, such as paste fills, are now becoming mainstream. The capital for a modern backfill system may well run into the tens of millions of dollars.

The cost effective design of mine backfills is a complex process that must consider the available materials, the geomechanical requirements for the mine, the geotechnical properties of the fill, and a host of other mining and cost related factors. The life-of-mine costs for backfill can represent a significant part of the overall cost of the mining cycle, however, optimizing these costs requires an understanding of backfill engineering that goes beyond most university curriculums and minesite training. The workshop is designed to provide an "everything backfill" overview of backfill engineering primarily aimed at mining engineering and technical staff, and backfill operations personnel.

Key Learnings

This workshop will provide a unique overview of the engineering of a backfill system from the mining perspective. Lectures include the geotechnical properties of minefills, the geomechanics of minefills, numerical modelling, backfill mix designs, backfill quality control, and backfill instrumentation. Participants will gain a solid understand of the basics of backfill designs including industry standard design tools.

Your Instructors

The workshop will be led by a number of recognized industry experts in mine backfills. The workshop attendees will benefit from the background and experience of the instructors all of whom have a track record of success in the industry.

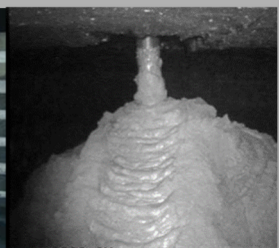
Dr. David Stone, P.E. is an internationally renowned expert in mine backfills with over 40 years of consulting to metal mines worldwide. Dave is a frequent author, presenter, and keynote speaker at mine backfill and tailings conferences worldwide, and is a trusted advisor to metal mining operations globally. He is the President of MineFill Services and is based in Tucson, Arizona.

Dr. Murray Grabinsky, P.Eng. is an expert in field sampling and instrumentation of backfills. Murray is a Professor at the University of Toronto and is widely recognized for his research into the behavior of paste fills and barricade designs.

This workshop is hosted by **MINEFILL SERVICES** a global provider of backfill engineering.



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Who Should Attend

This workshop is designed for a range of professionals involved in mine backfilling, including:

- Mining and geotechnical engineers
- Rock mechanics engineers
- Tailings engineers
- Technical services professionals
- Project/Study managers
- Backfill plant operators
- Backfill technicians and QA/QC staff
- Metallurgists
- Environmental managers
- Equipment vendors

Date/Venue

This three day workshop is to be held on Tuesday, February 7 through Thursday, February 9, 2023 at the NIOSH Spokane Laboratory, 315 E. Montgomery Avenue, Spokane. Local accommodation is available in the Spokane area. Suggested hotels include: Ruby River Hotel, Courtyard by Marriott or Holiday Inn Express. Delegates are responsible for their own accommodations.

Space will be limited and is being offered on a first-come, first-serve basis. The registration fee includes a printed workbook with all of the presentation materials, plus lunches/tea/coffee breaks during the workshop.

Registration and Fees

The workshop fee is US \$1,495 per delegate. Please download our Workshop Attendee Form from our web site at www.minefill.com. For corporate invoicing, please send us an email with the names and job titles of the participants, and a billing address.

Workshop Contacts

Please direct all workshop enquiries to:
Bev Heiszler, Workshop Coordinator
workshop@minefill.com

Workshop Agenda

Module	Tuesday	Wednesday	Thursday
0830-1000	Backfill Selection	Rock Mechanics	Backfill Quality Control
1000-1030	Break	Break	Break
1030-1200	Rockfills Hydraulic Fills	Backfill Geomechanics	Modelling Instrumentation
1200-1300	Lunch	Lunch	Lunch
1300-1430	Paste Fills	Binders Backfill Strengths	Barricades Case Histories
1430-1500	Break	Break	Break
1500-1630	Geotechnical Properties	Mining Under Backfill	Backfill Operations
Evening	Free Evening	Social Functon	Free Evening

Disclaimers:

**The sponsor reserves the right to cancel the course if the registration is insufficient.

**The availability of the workshop presenters is not guaranteed and substitutions may be made.

**The workshop agenda is for information purposes only and may be modified prior to the workshop date.



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HOW TO REACH US

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