2025 Ground Control in Mining Industry Seminar

Dates and Location

July 24, 2025 – Full-day Seminar
July 25, 2025 – Morning Hands-on Workshops

National Mine Health and Safety Academy
1301 Airport Rd, Beaver, WV 25813

Overview

MSHA will host the 2025 Ground Control in Mining Industry Seminar at our National Mine Health and Safety Academy. Presentations and workshops, including those submitted for the 44th International Conference on Ground Control in Mining, will highlight improvements in ground control technology to increase the safety and productivity of new and existing underground mines.

The Seminar on Thursday will provide an overview of current ground control best practices for coal and stone mines, hands-on software training, and networking opportunities for coal and stone mining professionals and mining engineering students.

On Friday, Technical Support will provide instructional compliance assistance workshops highlighting the tools that are used to develop roof and ground control plans. These tools include the Analysis of Mine Roof Support (AMRS), Analysis of Coal Pillar Stability (ACPS), and S-Pillar software. Participants should bring their laptops with the software, available from: http://www.minegroundcontrol.com/ground-control/

Up to 10 PDH credits are available for attendance at this instructional workshop.

Seminar Proceedings will be distributed to attendees at https://groundcontrolmining.org/.

Registration and Lodging:
Seminar registration is free, but space is limited. To reserve a seat, please complete the form at: https://forms.office.com/g/1KFJgznh8D

There are a limited number of rooms (single queen accommodations) available for lodging at the Mine Academy for $46/night. Please indicate when you register if you will be staying on-site at the Academy.

Job Fair and Operator/Vendor/University Networking Showcase – Thursday July 24 through Friday July 25, 2025
Tables can be reserved for mine operators, vendors, and universities to display and distribute information about their organization, services, and upcoming opportunities for the duration of the seminar with a job fair and networking event between 4:30 pm and 6:30pm. Setup cab take place on Thursday between 7:00 am through 4:30 pm. Tables can be reserved through the registration link: https://forms.office.com/g/1KFJgznh8D

For questions, please contact Greg Rumbaugh (Rumbaugh.Gregory.M@dol.gov).

Schedule

Seminar Program – Thursday July 24, 2025 (Auditorium)

7:00 am – 8:00 am
Registration (Auditorium Lobby)

8:00 am **Welcome and Introductions**

8:15 am **Fundamental Ground Control Studies**
Chair: Greg Rumbaugh

- ***Mining Under Flooded Mine Workings and Other Sources of Groundwater*** *Zach Wedding*
- ***Physical Modeling of Complex Coal Rib Brow Failure and Its Applicability to Numerical Modeling*** *Cameron Mitchell*
- ***Ground Control at the WIPP Site: A Historical Episode*** *Chris Mark*

9:25 am **Case Histories**
Chair: Rudrajit Mitra

- ***Factors Influencing Bituminous Coal Production in Western Pennsylvania*** *Gaetano Iannacchione*
- ***Geotechnical Analysis of the Collapse Blasting of Historic Underground Workings*** *Daykin Schnell*
- ***Analysis of Stone Pillar Stability Using LaModel Against Traditional Methods*** *Chris Newman*

10:45 am **Operators' Session**
Chairs: Sam Baker and Cody Hildreth

- ***Development with Ultra-Close Over Mining*** *Mark Morris*
- ***TBD*** *Thomas Du*
- ***Itmann No. 5 Retreat Mining*** *Jun Lu*
- ***Retreat Mining Legacy Mine Works*** *Jason Hess*

11:45 am **Networking Lunch** (Available for purchase in Academy Cafeteria)

1:00 pm **Numerical Modeling Applications**
Chair: Zach Agioutantis

- ***Using LaModel for Analyzing Stress Distribution in Benched Areas for Possible Massive Stone Pillar Collapse*** *Deniz Tuncay*
- ***Evaluating Grouted Rib Bolt Performance in Coal Mining: Insights into Critical Anchorage Levels and Failure Mechanisms*** *Cameron Mitchell*
- ***Enhanced FLAC3D Modeling of Shale Roof Anisotropic Brittle Failure through Image-Based Bedding Plane Extraction*** *Gaobo Zhao*

2:15 pm **Surface Subsidence**
Chair: Caroline Gerwig

- ***Analysis of Final and Dynamic Surface Movements Due to Longwall Operations Under Steep Terrain in the Eastern US*** *Mauricio Parra*
- ***Prediction of Dynamic Movements on Power Transmission Towers due to Longwall Mining*** *Zach Agioutantis*
- ***Case Study for Estimating Surface Subsidence Potential over an Abandoned Multi Seam Coal Mine in Eastern Kentucky*** *Ravi Ray*

3:30 pm **Case Studies**
Chair: Chris Mark

- ***Landslide Occurrences Associated with Legacy Coal Mining in Southwestern Pennsylvania*** *Anthony Iannacchione*
- ***TBD*** *Greg Hasenfus*
- ***Blasting Considerations for Adverse Geologic Conditions*** *Chris Newman*

4:30 pm – 6:30 pm
Job Fair and Networking for Students and Professionals
(Cafeteria and Auditorium Lobby)

Compliance Assistance Workshop Program – Friday July 25, 2025

8:00 am Analysis of Coal Pillar Stability (Classroom 123)
8:00 am Analysis of Mine Roof Supports (Classroom 131, 133)
8:00 am S-Pillar Stone Mine Pillar Design (Classroom 135)
10:00 am Advanced Applications of ACPS (Classroom 123)
10:00 am Analysis of Mine Roof Supports (Classroom 131, 133)