



## The National Institute for Occupational Safety and Health (NIOSH)

# Mining Product: MCP – Methane Control and Prediction

Original creation date: July 2009

Authors: C Karacan

**Note:** The MCP software is encountering compatibility issues with the latest version of Microsoft Windows and the 64-bit version of Microsoft Office. Staff are currently diagnosing the issue to determine a fix.

MCP is a software program that addresses some of the methane and methane control issues in longwall coal mines in the U.S. and other countries. The download file is a self-extracting executable which will automatically run a setup program. The installation computer should have Microsoft Access® 2003 or later installed.

MCP was developed to address some of the methane and methane control issues in longwall coal mines in the U.S. and other countries. MCP 2.0 is an update to previous versions 1.2 and 1.3 and contains the following two main software model categories:

1. ancillary models
  - total gas content prediction for coals
  - desorbable gas content prediction for coals
  - coal measure rock mechanical properties prediction
2. methane prediction models

MCP 2.0 offers two sets of methane prediction models:

1. **Models for Specific U.S. Conditions**, which directly relate to specific U.S. longwall mining conditions and to the mining operations in specific states, and
2. **Models for Other U.S./International Conditions**, which are applicable to "other U.S." conditions and also to international projects.

These models have both deterministic and stochastic options to allow better control of design parameters. The application of these modules, separately or in combination, for methane-capture and -control-related problems will help improve safety of mines, provide guidance for effective ventilation practices, and help identify opportunities for capturing and utilizing methane, which is an important energy source and a potent greenhouse gas.

Audience: Mining engineers, mine ventilation engineers or professionals, CBM/CMM/VAM producers and project developers, natural gas engineers, and academia of related disciplines



### Software (Windows) - September 2010

Version: 2.0

[Download \(8.46MB\)](#)

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