

1. Record Nr.	UNINA9910698307103321
Titolo	Guidelines for the prediction and control of methane emissions on longwalls
Pubbl/distr/stampa	[Place of publication not identified], : U S Department of Health and Human Services CDC/NIOSH Office of Mine Safety and Health Research, 2008
ISBN	1-61583-957-7
Descrizione fisica	1 online resource (83 p.)
Collana	DHHS (NIOSH) publication ; ; no. 2008-114 Information circular ; ; 9502
Soggetti	Mechanical Engineering Engineering & Applied Sciences Metallurgy & Mineralogy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1. Reservoir modeling for predicting methane emissions in development headings (entries) -- 2. Controlling longwall face methane and development mining emissions: predicted improvements using in-seam boreholes -- 3. Characterizing and forecasting longwall face methane emission rates for longer longwall faces -- 4. Predicting methane emissions from longer longwall faces by analysis of emission -- contributors -- 5. Development of numerical models to investigate permeability changes, distributions, and gas emissions around a longwall panel -- 6. Methane emission control during mining of longwall panels using gob gas ventholes -- 7. The application of gob gas ventholes to control methane in wider longwall panels and gobs -- 8. Induced fracturing and coalbed gas migration in longwall panel overburden: the NIOSH borehole monitoring experiment6 -- Practical guidelines for controlling longwall coalbed methane
Sommario/riassunto	"Although longwall mining productivity can far exceed that of room-and-pillar mining, the total methane emissions per extracted volume associated with longwall sections are generally higher than those for continuous miner or pillar removal sections. Increased face advance rates, increased productivities, increased panel sizes, and more

extensive gate road developments have challenged existing designs for controlling methane on longwalls. Methane control research by the National Institute for Occupational Safety and Health (NIOSH) recently examined a number of practices designed to maintain concentrations in mine air within statutory limits and consistently below the lower explosive limit. In this report, several practical guidelines are recommended for controlling longwall coalbed methane. All predictions are based on determinations made for the Pittsburgh Coalbed in southwestern Pennsylvania."
