Respirable Dust Control Technology Related to Mining

Research Objectives
NIOSH seeks R01 applications in response to PA-07-318 for research that will advance the fundamental knowledge of coal mine dust control. Studies of the relationship between respirable dust particles and capture mechanisms are highly encouraged.

Examples of possible areas of research include:
- Particle surface properties, such as interactions between particles and various collection media or the charging characteristics of particles
- The effect that particle charge may have on the capture efficiency of surfactants
- The development and demonstration of novel control techniques, such as new extraction methods that reduce airborne concentrations of respirable coal and silica dust

All proposed research must be relevant to dust control in underground coal mines. Applicants must demonstrate an understanding of the current state-of-the-art methodologies in coal mine dust control.

Background
Over-exposure to respirable coal and silica dust and new cases of lung disease continue to occur for miners working in underground coal mines. After thirty years of declining prevalence for Coal Workers’ Pneumoconiosis, recent surveillance data show that the prevalence is now increasing. Continuous miner, roof bolter, and longwall shearer operators have elevated risk of over exposure and are in need of improved dust control technologies to prevent future cases of lung disease. As real-time personal dust monitors come into common use, new opportunities exist for reducing dust to lower levels. Achieving lower dust levels will require the development and application of new dust control methods that go beyond the application of today’s principal controls (e.g. air and water).

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The Application Deadline for PA-07-318 is June 5, 2009

Let Us Know
If you anticipate submitting an application, please tell us by May 1, 2009. To do this you can send an e-mail to: NIOSH/OEP Correspondence (CDC). Use the subject line: Respirable Dust Control Technology Related to Mining. In your e-mail please provide the:
- Descriptive title of proposed research
• Name, address, and telephone number of the Principal Investigator
• Name of your institution or organization
• Names of key personnel or collaborators

The information you provide will allow NIOSH to plan the review. Submission of this information to NIOSH is voluntary.