

Request for Proposals (RFP) Topic:	Date of RFP	Excerpt of Description:	Work Products	Awardee(s)
Wireless Mesh Mine Communication System 2007-N-09181	11/17/06	“The NIOSH program is looking for an underground communication system that is highly reliable and provides in-mine and mine-to-surface voice and data communication. This project will evaluate wireless mesh network technology as part of the underground communication system.	Phase I: System design Phase II: Demonstration of Prototype in Experimental Mine Phase III: Demonstration of Prototype in Operational Mine	SY Coleman Corporation* (Arlington, VA) Contract #: 200-2007-20388 Award Date: 5/25/2007 \$ 2,351,764.00
Location Tracking System for Underground Coal Mines 2007-N-09216	1/29/07	“Several tracking systems hold promise for meeting the requirements of the MINER Act, but further research and evaluation is required to determine the feasibility of using them in an active coal mine. ...In regards to location tracking technologies the solutions can be viewed in three broad categories: zone or proximity based systems, node-based radio location technologies, and infrastructure autonomous...but only the latter category is currently viewed to hold the potential to render the location determination with very high reliability and accuracy in a post disaster scenario as envisioned by the MINER Act.” “The two types of possible location tracking systems that are known to be of interest are: Reverse Radio Frequency ID tags and Inertial Navigation units. (but there may be others and bidders are encouraged to present novel ideas for consideration.)”	Phase I: System description and feasibility testing Phase II: Design Phase III: Long-term test and evaluation	SY Coleman Corporation (Arlington, VA) Contract #: 200-2007-21250 Award Date: 7/25/2007 \$2,127,110.00 Extreme Endeavors & Consulting (Philippi, WV) Contract #:200-2007-21249 Award Date: 7/25/2007 \$ 813,000.00
Leaky Feeder Mine Communications 2007-N-09180	10/19/06	“In the project, a survivable underground mine wireless distribution system will be demonstrated. ...The wireless distribution system must support legacy UHF/VHF mine communication devices that are commonly used in mines today...the system solution currently envisioned incorporates the existing leaky feeder system in use in mines today.” “The successful bidder will enumerate how their system will accommodate survivability and propose additional strategies that will enable the system survivability to be tested and demonstrated.”	Phase I: System Design Phase II: System Development Phase III: System Demonstration	Pillar Innovations LLC Contract #: 200-2007-20064 \$1,571,986.00
Refuge Chambers 2007-N-09190				Foster Miller Inc Contract #: 200-2007-20276 \$1,040,650.00

*SY Coleman's partners in this project are identified (in the firm's news release) as:

- Alion Science and Technology (McLean, VA)
- Innovative Wireless Technologies (Forest, VA)
- Marshall Miller & Associates (Bluefield, VA)
- Pyott-Boone Electronics (North Tazewell, VA)
- Virginia Center for Coal and Energy Research (VCCER) at Virginia Tech (Blacksburg, VA)

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Relevant Excerpts from MINER Act:

(1) "Post-Accident Tracking: Consistent with commercially available technology and with the physical constraints, if any, of the mine, the plan shall provide for the above ground personnel to determine the current, or immediately pre-accident, location of all underground personnel. Any system so utilized shall be functional, reliable, and calculated to remain serviceable in a post-accident setting."

(2) "Post Accident Communications: Not later than 3 years after the date of enactment of the MINER Act, a plan shall, to be approved, provide for post-accident communication between underground and surface personnel via a wireless two-way medium, and provide for an electronic tracking system permitting surface personnel to determine the location of any persons trapped underground or set forth within the plan the reasons such provisions cannot be adopted."

Supplemental Federal Appropriation. (Fall 2006)

SEC. 7010. For an additional amount for "Department of Health and Human Services, Centers for Disease Control and Prevention, Disease Control, Research and Training", to carry out section 501 of the Federal Mine Safety and Health Act of 1977, **\$10,000,000** for research to develop mine safety technology: Provided, That progress reports on technology development shall be submitted to the House and Senate Committees on Appropriations and the Committee on Health, Education, Labor and Pensions of the Senate and the Committee on Education and the Workforce of the House on a quarterly basis, with the first report due July 15, 2006: Provided further, That the amount provided under this heading shall remain available until September 30, 2007: Provided further, That the amount provided under this heading is designated as an emergency requirement pursuant to section 402 of H. Con. Res. 95 (109th Congress), the concurrent resolution on the budget for fiscal year 2006.