## Members of the Syd S. Peng Ground Control in Mining Award Committee - July 14, 2008

I would like to nominate Anthony T. Iannacchione for the 2009 Syd S. Peng Ground Control in Mining Award. I believe his long standing involvement, experience, and knowledge in ground control make him an excellent candidate for this award. He has spent over 30 years of his professional career working with the mining industry to improve the health, safety, and environment of our nation's mines and miners. During this time he has been intimately associated with the U.S. Federal Government's ground control research program, both in conducting the actual research and in managing its execution.

Anthony has a long standing record of scholarly publications in the fields directly and indirectly related to ground control in mining. This inevitably comes from his strong desire to learn new things, to work on challenging problems, and to help transfer useful knowledge and skills. He has three graduate degrees in both Engineering and Geology, generating a unique appreciation for how these two disciplines influence our mining industry. Two of these degrees, an MS and PhD are in Civil Engineering and one degree, an MS, is in Geology, all from the University of Pittsburgh. He is also a registered Professional Engineer and Geologist in the Commonwealth of Pennsylvania. Anthony's areas of ground control expertise include 1) geologic field mapping, 2) hydrology, 3) geophysical / seismicity, 4) geotechnical instrumentation, 5) rock mechanics, 6) slope stability and tunneling, 7) numerical modeling, and 8) rock reinforcement design. Other areas of expertise include 9) ventilation, 10) waste isolation, 11) mining occupation health and safety, and 12) risk assessment and risk management. Please see his Curriculum Vita for more information on these topics. All of the above activities are documented in over 100 papers and abstracts, 56 of which are papers where he is the first author and 17 of those were subjected to intense outside agent peer reviews. In addition, Anthony is currently enrolled in the MS degree program in Minerals Industry Risk Management at the University of Queensland, Brisbane, Australia.

Anthony has also had a long standing role in managing the federal government's ground control research program. He first assumed a management role in 1983 as a group supervisor for the U.S. Bureau of Mines. He undertook many other management duties over the next 20 years culminating in his role as the Deputy Director for the Pittsburgh Research Laboratory during its transition into the National Institute for Occupational Safety and Health. Through all of these positions he has always tried to maintain a balance between conducting research, mentoring younger engineers and geologist, and providing programmatic leadership. These positions have exposed him to a wide range of organizational issues ranging from reviewing and planning a research program, allocating funds, promoting of scientist and engineers, complying with laws and standards related to labor/management interactions and occupation health and safety, and mentoring of staff to help them achieve organizational goals.

During his career he has always kept a close affiliation with university education through graduate coursework, lectures at department seminars, thesis and dissertation committee assignments, and undergraduate and graduate teaching. For example, he has taught courses in mining at West Virginia University, Penn State – Fayette, and the University of Pittsburgh. He has develop extensive ties with individuals at all levels within the mining industry, developed, in part, during visits to over 300 different surface and underground mine in the U.S, Canada, Australia, Bulgaria, and Brazil and while attending over 100 conferences, seminars, and symposiums. Most of his efforts have been spread between the coal, salt and limestone sectors of the mining industry. These efforts range from helping to sponsor workshops on coal pillar design, assessing the stability of the Waste Isolation Pilot Project, and co-organizing the very successful Underground Stone Safety Seminar. Currently he is involved in

a field project to evaluate the use of microseismic emissions to detect large roof falls in underground mines, conducting risk assessments at deep cover retreat mining operations, and co-organizing a Safety Summit for Small Coal Mines (set for Logan, WV on September 17, 2008).

Lastly, Anthony is a strong proponent of participation in professional societies. He is a member of the Society for Mining Engineer (SME), the American Society of Civil Engineers (ASCE), the American Rock Mechanics Association (ARMA), and the Pittsburgh Geological Society. Over the last 11 years, he has been very involved in the 1,600 member Pittsburgh Section of ASCE, recently served as its president. He has also been involved in the American Rock Mechanics Association, serving on the organizing committees of two symposiums (DCRocks and AlaskaRocks) and recently joining its board of directors as its Secretary. He has served on several expert panels, two of which were associated with the Waste Isolation Pilot Project (WIPP) in Carlsbad, NM and has appeared before a congressional subcommittee in 1991. Recently, he participated as a committee member in the National Science Foundation's review of the Conceptual Design Reports for the Deep Underground Science and Engineering laboratory (DUSEL) and as a member of the Mine Safety and Health Administration's Crandall Canyon Expert Review Panel (August 19-21, 2007).

Based on all the above, I feel honored to nominate Dr. Iannacchione for the 2009 Syd S. Peng Ground Control in Mining Award "for his outstanding contributions to underground rock engineering, specifically for developing practical tools related to mine seismicity and risk analysis."

Sincerely,

Murali M. Gadde, Senior Engineer, Ground Control.