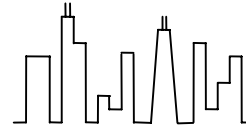


CHICAGO SECTION NEWSLETTER

May 2006

Newsletter of the Chicago Section of the Society for Mining, Metallurgy, and Exploration, Inc. - Founded Spring 1987 – www.chicagosme.org



MEETING: Wednesday, May 24, 2006

Topic: “Specialty Tunneling – Tunneling
Methods Under Low Cover Conditions”

Guest Speakers: Terry Tilley, Project Manager
Dynatech Mining & Construction Inc.



Time: 5:15 PM Social Hour
6:00 PM Dinner *Please - We need advance reservations – check the menu below.*

Place: *formerly the* RAMADA INN at Burr Ridge **NOW The OAKS HOTEL** (as of April 13th)
300 South Frontage Road, Burr Ridge, IL. 630-325-2900

Directions: *From I-55:* Exit # 276A - County Line Road South, go to the first traffic light
Turn Right, then the road turns an immediate right; follow the road
around until you are parallel to the freeway, past the Extended Stay America.
The Ramada will be another 150 yards ahead on the left.
From I-294: Exit on I-55 Westbound. County Line Road will be the next exit
From I-88 & I-355: Exit to I-355 southbound, go to end of freeway at I-55
Head east toward Chicago: County Line Road is just east of Kingery
Highway (IL # 83)

Menu: Service will be restaurant style, with *your choice of two entrées:*

Stuffed Chicken Breast, breast of chicken filled with
our homemade cranberry almond sage dressing, topped
with supreme sauce

Roast Sirloin of Beef, Sliced prime sirloin, au jus

Dinner will include an appetizer, salad, vegetable, potato or rice and dessert.

A vegetarian plate is available on request.

Cost: \$25 for dinner/meeting for Members, \$30 for Non-Members. Science teachers or professors
are considered guests of the Section and will get dinner free. Student’s dinners are only \$5.

If you are coming RSVP; **PLEASE**. Call or e-mail either

Gordie Stevens of Civil & Environmental Consultants at 630-963-6026 gstevens@cecinc.com

Rick Ackermann at 630-740-4863 rackermannaz@yahoo.com

From the Chairman:

Soon we will be drawing another Chicago Section meeting year to a close. As is traditional, we will be having elections for the Section Executive Committee. As you will see there will be some slight modifications to the election slate. I just went through some old material and realized I have been Chair of the Section since 2000. As much as I enjoy being Chair, I realize it is time to let someone else step up and bring a fresh perspective to the Section. I want to thank you for your support during these years. I really enjoyed it. John Head has agreed to step into the role and I will step back as Vice Chair, if you so choose during the election. For the first time, I have taken on a small role on the SME national level as a Chair of a technical session at next year’s Annual SME meeting in Denver, and I will still be representing AIME and SME (national) on the Washington Award Commission. Another high point to this coming meeting will be the opportunity to meet and hear from Mr. Terry Tilley our guest Henry Krumb Lecturer. He will be traveling in from Salt Lake City to speak to us about Specialty Tunneling methods. This topic is appropriate for some of the rock and soil conditions we experience here in Chicagoland, especially with the numerous underground mining projects that have cropped up here during the past few years. I know this is a difficult time of the year to break away from busy schedules and pleasant, sunny evenings. However, let’s put forth a good show of support for Mr. Tilley and the Section. I would appreciate it. Thanks.



From Gordie Stevens

From the Program Chairman

At This Meeting:

**Terry Tilly, Project Manager
from Dynatec Mining, and
SME Henry Krumb Lecturer**

“Specialty Tunneling Methods under Low Cover Conditions ”

A Brief Synopsis:

The mining and tunneling industry has become highly mechanized and cannot normally accommodate a project where surface disturbance must be minimized or eliminated when there is from 0 to 10 feet of ground cover. More traditional, less mechanized methods must be employed and the skills and techniques for accomplishing this work have become all but non-existent.

The paper will describe the design approach, the methods of ground support and excavation selected, and the planning, scheduling and materials selection process. In addition, the paper will describe the actual production characteristics and the results of the project. This approach will concentrate on productivities, adaptations to actual conditions and the quality of the end product with minimal reference to pricing/costing of the project. .

The design approach basically was to insure that the temporary support methods were adequate for the excavation and shoring stage of the project. The final concrete liner was designed as well by using conventional structural design methods with the goal of constructing a tunnel that will last 100 years. The methods of support were spiling and variations of spiling in order to provide advance ground support.

Tilly will discuss the applicability of the methods give an evaluation of the actual performance of the excavation and shoring methods. The final concrete liner completion results, the actual production rates and the conformance with budget and schedule will be addressed.

The Speaker

Terry Tilly is a Project Manager for Dynatec Mining Corporation. He was responsible for construction of the tunnel described in this presentation, which was driven under a city block in Salt Lake City. The tunnel was driven under low cover conditions and is the subject of a paper that was prepared for the SME Conference in Salt Lake City in 2005.

Terry has worked for Dynatec for over 10 years on a variety of projects beginning with the development of the Meikle Mine for Barrick Goldstrike Mines, Inc. in Northern Nevada. The Meikle Mine development included two vertical, concrete lined shafts and over 10,000 linear feet of development drifts.

Prior to working for Dynatec Terry worked for Chevron Corporation mining uranium in South Texas, Colorado Shale Oil, Base Metals in Maine and Gilsonite in Utah. He is a graduate of The University of Utah with a Bachelor of Science in Mining Engineering.

The Last Meeting

Roger Gibbs of **Dry Systems Technologies** outlined the development of DST's system for cleaning diesel particulate matter from diesel exhaust systems. The system is designed for either a retrofit on existing equipment or can be installed on new machines.

DST has developed explosion-proof engine packages that are used in gassy areas of underground mines and tunnels. DST products include: permissible intake systems, permissible and non-permissible exhaust treatment systems, and engine repowers. DST is named for its unique approach to exhaust treatment. Dry Systems Technologies exhaust treatment is a closed system where the exhaust does not come in direct contact with the coolant; hence there is no evaporation of the cooling water. This system eliminates the need to refill water tanks and eliminates the maintenance issues of the floats. The cooled exhaust gas is then filtered by a DST filter which will remove 96% of the DPM, Diesel Particulate matter.

The system has a five figure minimum installation cost but has minimal operating and maintenance costs. The major operation cost is generally filters which run between \$1 and \$2 per operating hour.

By the Editor

Looking for Speakers for Next Year:

The Chicago SME is in the process of scheduling speakers for all of next year. If you have a subject you are interested in hearing presented, know of someone you would like to have speak to our group, or would like to give a talk yourself, please contact our program chair, **Frank Kendorski** at **630-792-1520** or you can e-mail him at frank@agapito.com.

UPCOMING MEETINGS & EVENTS

For your schedules

Upcoming Classes

NSSGA Noise & Dust Monitoring Course

North Branford CT June 27-29, 2006

Oak Ridge, TN, August 29-31, 2006

For more information go to this link:
<http://www.nssga.org/calendar/ndw/>

The PIE & GEM Committees

Looking for Teachers: The 2006 IAAP Science Teachers' Workshop

The 11th Annual IAAP Science Teachers' Workshop has been scheduled for July 19-21, 2006 at Pere Marquette State Park near Grafton, Illinois. In addition to the Workshop brochures sent out by the IAAP, the **PIE** Committee has drafted a "canned letter" available in MS Word format. (See attachment) The purpose of this letter is to make it easier for IAAP members to identify teachers interested in attending our workshop.

If you would like to sponsor a teacher from your area, but don't have someone in mind, you can customize the canned letter to fit your company and mail it to your local

school district. The school district will then select the teachers to attend or pass it to the science departments. By customizing the letter and putting it on your letterhead, the school district recognizes that you have an interest in helping them educate. So far this year, the number of teachers registered for our annual workshop has been less than in previous years. We hope to increase the amount of teachers registered by encouraging our members to send out the attached letter.

If you are looking to sponsor a teacher or you need more information about the Science Teachers' Workshop, please Dan Larson, Chair of the IAAP PIE Committee at (815) 895-4437 or visit IAAP's website: www.iaap-aggregates.org.

This letter is to inform you of the continued great success of the annual IAAP Science Teachers' Workshop. The IAAP Public Information & Education Committee wants to say thanks to the many past workshop sponsors. They appreciate the IAAP members who have sponsored these teachers and want to inform you that over 200 teachers have attended the Workshop.

Many of the teachers said it was the best workshop they had ever attended and admitted they knew so little positive things about our industry before attending. As in years past, teachers who attended prior workshops will be in attendance and will share their classroom successes with the new teachers.

Editors note: the IAAP also is interested specimen donations for teaching kits which are given to each teacher.

Information provided by John Henriksen, IAAP

MEMBER NEWS

Local Mine Rescue Team Competes at Ottawa

On May 10 the Illinois Department of Natural Resources hosted the inaugural metal/non-metal mine rescue contest in Ottawa. The IL State team and one from Detroit Salt Company competed. Both are novice teams, participating in their first contest.

The teams were given a disaster scenario and then "entered" the mine to solve the problem and locate the two missing miners. Using their training, they had to deal with ventilation issues, the mine fire, apply first aid, and successfully bring out the survivor. There was also a fatality in this scenario.

MSHA officials served as the contest judges. It took each team nearly 90 minutes to complete the problem. When both were finished, there was a conference with the judges to discuss deductions and ways to improve their performance. Both groups agreed that it was a great experience to utilize all the skills they have been practicing in small segments.



Part of the Illinois team analyzing the problem

Lunch was provided by the aggregate companies that have underground operations in northern IL.

The mine rescue contest rated a front page article and color photo in the May 11 issue of the LaSalle News Tribune. Spectators are welcome, so contact the IDNR if you would like to know about future local mine rescue contests.

MSHA regulations require that underground mines have a mine rescue team organized either regionally or at each mine site. This region has a mine rescue team organized through the cooperation of MSHA and several local companies with a base in Peru, Illinois. The 12 member team draws men from several companies, including three from Conco Western Stone. The team captain is Brian Washkowiak, mine foreman at Conco's North Aurora operation. Due to personnel changes at the team member's companies, most of the team members have changed over the past few years. Companies which have or are planning underground operations should consider supporting this regional team,

including making the rescue practices part of volunteer's work schedule.

For more information contact Kevin LeGrand of MSHA at Peru by phone at (815) 223-0697, or via e-mail at LeGrand.Kevin@dol.gov.

*Information & photo by Linda Hiltabrand
Additional information by the Editor*

New Underground Mine in Chicago Area

The Port of Will County Mine, located in Joliet just southeast of the Des Plaines River, one mile west of Vulcan's Laraway Road quarry in Joliet, is currently in the development stage. The drop cut has been excavated in preparation for beginning the decline. Currently, the face around the portal area being supported with bolts, wire mesh and shotcrete. The portal will be started in about 2 weeks, as soon as the ground support work on the decline face is completed.

The mine is being developed by Mining International LLC, a new operating company in the Chicago area. The project engineer is **John Head** of **Continental Placer Inc.** The mining contractor is Guy F. Atkinson Mining Division, headed by Joe Cooper, former owner and President of American Mining Services. Atkinson purchased AMS last year and incorporated AMS' capabilities into their mining division.

The decline will be 21 ft high X 18 ft wide at a minus 17.5 % grade, with an arch back thru the shale, with rock bolts and shotcrete for ground support. The excavation will be driven for a slope distance of 1400 feet in the Silurian limestone formations and the Maquoketa Shale to reach the mine development level in the Galena formation. Atkinson will use the same Voest Alpine AM105 roadheader that excavated the Fox River Stone twin declines finished last February in South Elgin.

The mine is located at 1955 Patterson Road, Joliet, just north of Laraway Road. For more information contact **John Head** at CPI at 630-407-0800 Ext 103 or via e-mail at jhead@continentalplacer.com.

Information Provided by John Head

Chicago SME Officer Nominations For Next Year

Listed below are the officer nominations for the Chicago Section for next year. Also included is a partial list of the appointed positions. Please note the vacancies for which volunteers are still needed. If you are interested in serving as an officer or on one of the committees, contact **Gordie Stevens** at 630-963-6026. See page 6 for a list of current officers and committee chairs.

Elected Positions

Chairman: - John Head, CPI
Vice Chair - Gordie Stevens, CEC
Treasurer - Steve Tivy, Boncosky Oil
Secretary - Brad Renwick, CEC

Committee Chairs

GEM Coordinator- Anne Leslie Raimonde
Newsletter - Rick Ackermann - Conco
Website - Rudy Stein, CEC
Program Chair - Frank Kendorski, Agapito
Membership - Open
SME Section Rep - John Magyar, IMC

Information provided by Gordie Stevens

Dick Phelps Joins Christensen

Scottsdale, Arizona – Christensen, a global capital markets advisory firm, announced the appointment of Richard Phelps as a vice president of the firm to work with the Firm's clients in the global mining industry. Mr. Phelps' appointment coincides with Christensen's strategic efforts to expand its advisory services within the global mining industry. The firm currently has offices in New York, Hong Kong, San Francisco, Phoenix, and Montreal. He will be based in their Phoenix office and is in the process of relocating to Arizona. Dick is the former editor-in-chief of E&MJ, and his industry background includes shaft-sinking, silver, coal and mining finance.

Congratulations to Dick on the new position and good luck with the move.

Check out the full press release at <http://www.christensenir.com/News1.html>

From a friend of the editor-

The Last Mining Engineer The end of an era as another mining school closes

This spring at Michigan Tech, the same time honored tradition has repeated itself as the world was introduced to the newest group of engineers except that this year, the last mining engineer from MTU has received his diploma. The Michigan School of Mines began 1885 and is the third oldest mining school in the United States behind West Virginia University (1868) and the Colorado School of Mines (1874). Penn State (1888) began their mining program a few years later. There are thirteen mining schools left in all.

Enrollment for mining engineers is increasing at all of the schools with sign up bonus's being used to attract what few mining engineers that are graduating this year. Mining company stocks have skyrocketed, along with the price of every raw material that comes out of the ground. Many baby boomers such as my father are retiring.

I graduated from Michigan Tech as mining engineer in 1984 and my father before me in 1957. We are a family of miners and when including my grandfather and great grandfathers, we have been mining for 100 years. We have tried in vain for many years to get Michigan Tech to expand their mining focus to include construction aggregates, of which both of us had many years of success in, but to no avail. Construction aggregates are a direct correlation of population and as the population increases so does the number of mining engineers needed. The demand for mining engineers have not decreased, just the public's perception of what is politically correct.

I have spent my last twenty years in the mining industry faced with the constant criticism from multiple environmental groups about the impact of mining, yet not a single one of them is willing to give up their car keys. We as a nation have the best technology, the best trained people, and a constant growing demand for resources extracted out of the ground but we seem to have the concept that our environment is more important than someone else's. We

should take responsibility for our society's need for raw materials and balance that need as best we can against the impact to the environment and the professionals who can do it the best are mining engineers.

I wish you the best, Jeff Sudderth, as you are the last of a long line of some of the world's best mining engineers.

Jay Lukkarila
Mining Engineer
Class of '84
Adams, Massachusetts.

Excerpt from latest Mining and Metallurgical Society of America Newsletter

"As many in the industry now note, there is a critical shortage of early and mid-career mining professionals, not just mining engineers, but also geologists and metallurgists. The recession (a true depression in the mining industry) of the late 1990's and early 2000's in essence removed a generation of professionals from the industry."

Information provided by Dick Phelps

NEWS TO USE

IDNR Changes E-Mail Address Format

The State has changed the format of the IDNR email addresses. The old ones will work for about a year, but you might want to change your listings now. The format below will allow you to reach any employee.

firstname.lastname@illinois.gov

For example to e-mail Linda Hiltabrand of the IDNR in Peru the new address is:

linda.hiltabrand@illinois.gov

The office address for Peru is now:

IDNR-Office of Mines & Minerals
1825 Baker Lane, Suite A
Peru, IL 61354
815/223-9422; cell: 815/481-2201

Information Provided by Linda Hiltabrand

2005-2006 Chicago Section SME Officers

Chairman	Gordie Stevens Civil & Environmental Consultants, Inc. Downers Grove, IL 630-963-6026 Fax 630-963-6027 gstevens@cecinc.com	GEM Coordinator	Anne Leslie Raimonde Drilling, Inc. Chicago, IL 708-583-9290 Fax 708-583-9491 rdcdrill@rdc-drill.com
Vice-Chairman	John Head Continental Placer, Inc. Wheaton, IL 630-407-0800 x 103 Fax 630-407-0799 jhead@continentalplacer.com	Newsletter Editor	Rick Ackermann Conco Western Stone. North Aurora, IL 630-740-4863 Fax 630-892-1153 rackermannaz@yahoo.com
Secretary	Steve Tivy Boncosky Oil, Inc. Elgin, IL 847-741-2577 Fax 847-741-2590 svtivy@comcast.net	Website Coordinator	Sarah Schlichholz Continental Placer, Inc. Wheaton, IL 630-407-0800x109 Fax 630-407-0799 sschlic@continentalplacer.com
Treasurer	Brad Renwick Civil & Environmental Consultants, Inc. Downers Grove, IL 630-963-6026 Fax 630-963-6027 brenwick@cecinc.com	Program Chairman	Frank Kendorski Agapito Associates Lombard, IL 630-792-1520 Fax 630-792-1580 frank@agapito.com
Membership	Open	SME Section Representative	John Magyar International Mining Services Belvidere, IL 815-547-9211 Fax 815-547-8552 imsjjm@aol.com

SME Chicago Section Membership Dues Form - NOTE: You do not need to be a national member to join the local section. To become a member of SME at the national level, please join at www.smenet.org or get an application from Gordie Stevens.

NAME: _____

AFFILIATION: _____

ADDRESS: _____

E-MAIL: _____ @ _____

DAYTIME TEL. NUMBER: _____

SPONSOR'S NAME: _____

STUDENT _____ RETIRED _____

Make Check for \$20.00 (\$10.00 for Student or Retired) out to "Chicago Section – SME" and mail to: Brad Renwick, Treasurer, Chicago Section of SME, Civil & Environmental Consultants., 3041 Woodcreek Drive. Suite 210, Downers Grove, IL 60515

**NEXT MEETING
Wednesday, May 24, 2006**

**“SPECIALTY TUNNELING –
TUNNELING METHODS UNDER LOW COVER CONDITIONS”**

**Terry Tilley, Project Manager,
Dynatech Mining & Construction, Inc.**

**At the
OAKES HOTEL**

***Formerly the*
Ramada Inn at Burr Ridge:**

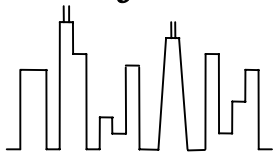
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300 South Frontage Road, Burr Ridge, IL.

Rick Ackermann
Newsletter Editor, Chicago Section SME
464 Waubensee Circle
Oswego, IL 60523

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