

THE BRINE

ISPE-SALTCREEK.ORG

SALT CREEK CHAPTER

MAY 2017

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SAVE THE DATES

- ✓ May 5, 2017 ~ 1st Friday
Webinar - Golf Course
Design
- ✓ May 12, 2017 ~ 9th Annual
Metro East Mini-Conference
- ✓ June 2, 2017 ~ 1st Friday
Webinar - Session Recap

PRESIDENT'S MEMO

We had our successful outing at Vulcan Materials for their quarry tour on April 19th, and I would appreciate some feedback. Please let me know if events such as this in the middle of the day work with your schedules. I know that there are more scheduling conflicts during the day compared with evenings. If the time was changed to first thing in the morning or later in the afternoon, would that work better for participating at an outing? Also, please send any suggestions for an outing to either myself or Dan Grecco. With our varied experiences and contacts, our members should be able to provide a long list of interesting events for our participation next year.

Thanks, John Eisele, P.E.

INSTALLATION BANQUET

Wednesday, May 24th at 7 p.m.

It is booked as a reservation, currently set at 12 people, but expandable to as many more if needed. We will be ordering directly off the menu. We will have a nice view of the Golf Course during sunset, while seated inside next to the Fireplace.

Wheatstack
5900 S. Route 53
Lisle, IL 60532
630-968-1920, opt. 2

<http://www.wheatstacklisle.com>

Cost: \$30 (drinks not included)

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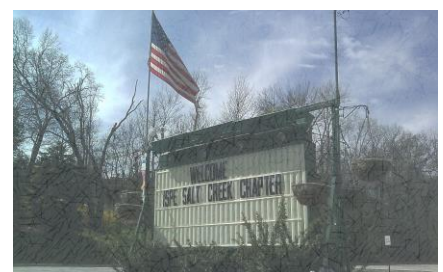
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APRIL 2017 MEETING SUMMARY – BY DAN GRECCO, P.E.

For our last regularly scheduled meeting in held in April, a lunch and tour of the McCook Quarry was arranged. Lunch was first held at J.C.'s Restaurant and Pub. We then carpoled and drove to a point near the McCook facility, where we were subsequently picked up by a tour bus. The tour bus and McCook facility is run by the MWRD of Chicago, while our tour guide and contact for the tour, William Graham, is an employee of Vulcan Materials. The tour lasted just under two hours. The purpose of the McCook quarry currently under construction is to ultimately provide a storm water detention to reduce flooding. The quarry has an outfall portion of the Deep Tunnel connected to it, as well as an overflow for the Des Plaines river. Work was initiated in 2007. A picture is provided of work, as completed on the day of the tour, April 19, 2017.



The access road can be seen to the left, and overall is about 300 feet deep. What appears to be a patch of greenspace at the bottom is actually in fact a very large mesh of epoxy coated reinforcement, for a concrete splash to be installed to receive water from the deep tunnel project. The total capacity of the first stage, to be completed this year is 3.5 billion gallons (or +10,700 acre ft). This picture is taken approximately ½ mile southwest of Route 171 (Archer Avenue) and two miles northeast of LaGrange Road, between the Desplaines River and Sanitary & Ship canal. We had to pass the MWRD drying basins on the way in, and as an added bonus also observed sediment being deposited by hydraulically tipped rail cars. More information obtained during the tour:

- Took the first two years to remove just all the overburden, with the use of a nearly three mile long temporary conveyor system.
- A ½ mile long connecting service tunnel 16 feet in diameter connects McCook to the nearby 55th Street Vulcan Facility. Rock is preliminarily crushed, and transported by a conveyor system through the tunnel. The tunnel runs underneath the Desplaines River, I-55 Stevenson Expressway, and a freight railroad line. A small pickup truck can also access through the tunnel, to service the conveyor transport system as needed.
- The second stage of the project is also underway, and will provide twice the volume of the first stage. It is not schedule for completion until 2029.
- An approximate +20 year hiatus of mining will be observed at the 55th Street Vulcan facility, while all production is concentrated at MWRD's McCook facility. In other words, all new blasting only to occur at McCook until completed.
- While the MWRD owns the site, Vulcan has exclusive mining rights. Approximately one dozen full time Vulcan employees always active.
- The 55th street facility is not completely dormant. All aggregate post production and distribution is facilitated from rock excavated received from McCook, via the connecting service tunnel.
- Timetables originally estimated in 2007 had to be adjusted about 30% longer, to compensate for the 2008 economic downturn in construction demand.

STEM EXPO 2017 WRAP-UP

Another very successful and well-attended EXPO at Illinois Tech (formerly Illinois Institute of Technology) in Wheaton was held on Saturday, February 25. Illinois Tech reported an attendance of over 2000. The guests, including children and adults, were surprised, educated and busy with the many interactive displays of the participating technical associations, businesses, community organizations and educational institutions. Check out www.facebook.com/IITSoAT for photos of the event, including some of the Salt Creek Chapter exhibit.

The **Salt Creek Chapter** exhibit included the Huff and Huff, Inc. (now part of GZA GeoEnvironmental, Inc.) interactive environmental engineering display with the prospect of a mini-chocolate bar reward for the eager youngsters! The students learned about topics including ground water, biology, invasive species, and hazardous waste. Our exhibit also had demonstrations of the application of engineering principals to everyday utensils, tools and household objects, as well as the use of gears for rotary to linear conversion, levers, fulcrums, and springs. Series and parallel electrical circuits were demonstrated, in addition to gear motors, electromagnets and permanent magnets. For fun, a Van De Graaff static electricity generator provided shocking amusement for young and old alike!

The **Salt Creek Chapter** display was staffed by **John Eisele, Darryl Carstensen, and Roger Klocek from Huff and Huff, along with Norm Gutauckas, Bud Hurley, Rich Symns and Dirk Krueger.** As in past years, Norm demonstrated his divining rod and his vast knowledge of what I affectionately call “voo-doo engineering.” **Thanks** to all those folks for their participation. We were also pleased to see Salt Creek Chapter past-president Tony Banasiak, with his son, touring the exhibits.

The goal of the EXPO is to create interest in engineering and science education, and future careers. The contribution of the staff at IIT West and the many volunteers went a long way to achieving this goal.

Dirk Krueger, P.E., Salt Creek Chapter EWeek Chairman

HUGE thanks to 2016-2017 chapter meeting speakers...

Steve Schultz, Ph.D., Writing at Work, Inc.

Eric Kara, Kara Company in Countryside, Illinois

Brian Zeeck, Hinshaw & Culbertson LLP

Glenn Clayton, Illinois Concrete Pipe Association

William Graham, Vulcan Materials McCook Quarry



ENGINEERS CREED

As a Professional Engineer, I dedicate my professional knowledge and skill to the advancement and betterment of human welfare.

I pledge to:

Give the utmost of performance.

Participate in none but honest enterprise.

Live and work according to the laws of man and the highest standards of professional conduct.

Place service before profit, the honor and standing of the profession before personal advantage and the public welfare above all other considerations.

In humility and with need of Divine Guidance, I make this pledge.



SALT CREEK CHAPTER PAST PRESIDENTS

1959-60	Dale V. Hammond	1960-61	Wayne M. Reed	1961-62	Clifford Kreelman
1962-63	Merl Mouser	1963-64	Richard V. Doherty	1964-65	Fred H. Sanneman
1965-66	Paul E. Flood	1966-67	Howard M. Rayner	1967-68	Richard O. Mitter
1968-69	John D. Eyestone	1969-70	Orville L. Meyer	1970-71	William Lazzari
1971-72	William Macarus	1972-73	William Cumming	1973-74	Alden T. Wulff
1974-75	Roy W. Morling	1975-76	Edward Stec	1976-77	David A. Dunn
1977-78	Larry VandeWalle	1978-79	James Valancius	1979-80	Edward Slindee
1980-81	Jack Stansbeary	1981-82	Thomas R. Kaar	1982-83	Dan Nelson
1983-84	Robert W. Cutter	1984-85	Randall W. Bus	1985-86	Joseph H. Rush
1986-87	Claude H. Hurley	1987-88	Carl F. Roth	1988-89	Gilbert Goodman
1989-90	Linda Huff	1990-91	Thomas Palansky	1991-93	Thomas Miller
1993-94	Arthur K. Banks II	1994-95	Richard Kipp	1995-97	William Lindley
1997-98	Craig Knoche	1998-00	Ronald Kuhlmann	2000-01	Douglas Criner
2001-02	Phillip Wolf	2002-03	Richard Pocius	2003-04	Anthony Banasiak
2004-05	Norman Gutauckas	2005-06	Claude H. Hurley	2006-07	Dale Durfey, Jr.
2007-08	Glenn Clayton	2008-10	Dan Grecco	2010-11	Gary Emore
2011-12	Frank Lech	2012-13	Richard Symns	2013-14	Leo Moritz
2014-15	Brandon Gorte	2015-16	Dawn Brook		