

Association of Environmental and Engineering Geologists

The Rocky Mountain Section Newsletter

OCTOBER 2007

MEETING DATE

THURSDAY
OCTOBER 11TH, 2007

TIME

5:45 p.m. Social Hour
6:30 p.m. Dinner
7:30 p.m. Presentation

LOCATION

Berthoud Hall,
Colorado School of
Mines
1516 Illinois St.
Golden, Co 80401
See Map Below

COST

\$25 Members
\$27 Non-members
\$10 Retired members
Students, Free first
time, then \$10

RESERVATIONS

Kristi Ainslie
(303) 440-5236
or
meetings@aegrms.org
or
WWW.AEGRMS.ORG

**BY NOON,
TUESDAY
OCTOBER 9TH**

JAHNS LECTURE: SITE CHARACTERIZATION FOR THE DESIGN OF EFFECTIVE GROUNDWATER REMEDATION PROJECTS

John E. Moylan, R.G.

Too often groundwater remediation projects have been implemented with too little site specific geologic, hydrogeologic, and geochemical site characterization data. There are differences of opinion as to whether groundwater can be effectively and efficiently remediated. In order to adequately address this question, we must openly and honestly discuss the factors affecting effective remediation, design and remediation methods, and perhaps most importantly performance monitoring data.

Literature reports of remediation often provide very little information on the hydrogeology or geology of the site. These are extremely important types of data if groundwater remediation case studies are to be truly useful. Many articles never clearly describe the aquifer material, don't state the range or distribution of hydraulic conductivities, or discuss the homogeneity or heterogeneity of the water bearing material. In these cases, it is seldom possible to determine whether the remedy being reported on is effective or efficient.

Remedies are often selected on the basis of the Feasibility Study (FS) or Corrective Measures Study (CMS) data and the data available at the completion of the FS or CMS may not be sufficient to support effective remedial design or development of an effective performance monitoring plan. These data commonly don't define many of the important subsurface parameters needed to develop a good design. Developing and implementing a design without the benefit of sufficient design data commonly leads to an excessively costly remedy or one that does not remedy the problem.

There are a number of geologic, hydrogeologic, and geochemical factors that potentially affect effective remedial design and remediation performance. In most cases, geologic, hydrogeologic, and geochemical factors are inter-dependant. Some of the important geologic, hydrogeologic, and geochemical factors are listed below:

Lithology	Formation heterogeneity
Stratigraphic detail	Contaminants
Nature of porosity	Non-contaminant chemistry
Hydraulic conductivity	Contaminant distribution
Confined or unconfined aquifer	Is source present
Boundaries	Source nature and distribution
Pumping effects	

Projects in Kentucky and Colorado will be used to illustrate the importance of adequate site characterization for effective groundwater remediation.

Words From the Chair

Wow! It seems like only yesterday that Tim Petz talked me into attending my first AEG meeting (mostly with the promise of good food and beer!). That was in the fall of 2000 and my how the things have changed. I am deeply honored to be serving all of you as Chairman of the best section in all of AEG for the 2007/2008 season. A big thanks goes out to our Past-Chair Liv Bowden for his leadership and vision for change in the section. I plan to continue along the path Liv started in keeping the poster-session format for Student Night which was a huge success this past spring.

For those of you who don't know me very well here is a little background. I graduated from The Ohio State University with a BS in Geology and worked the following 5 years in the environmental consulting business in Columbus, Ohio. The spring of 2000 found a move to Denver and change in career to geotechnical engineering and geologic hazard analysis for the next 5 years. I currently work in the environmental department for the Western US Region of Lafarge North America. I am excited for the upcoming year as I plan to blend my past experience to fully embrace both sides of the new Association of Environmental and Engineering Geologists.



The October meeting promises to be very exciting with the return of our members who have attended the National Meeting in Los Angeles and the honor of being one of the first sections to host the 2007/2008 Jahns Lecturer John Moylan. John will be presenting his talk entitled, "SITE CHARACTERIZATION FOR THE DESIGN OF EFFECTIVE GROUNDWATER REMEDIATION PROJECTS". Please join me in welcoming John to Denver by attending the October 11th meeting. Don't forget to RSVP and vote for your officers on the attached ballot. Here's to a great AEG season!

Steve Compton, PG
Chair AEG-RMS

2007-2008 Upcoming Meeting Presentations

Below is the tentative schedule of speakers for the 2007-2008 season. We will be adding presentation titles to future newsletters. As seen we have a few openings. If you are interested in giving a presentation please contact Steve Compton at chair@aeqrms.org.

- Oct 11, 2007 - Jahn's Lecture
- Nov 8, 2007 - Dr. Noe
- Dec 13, 2007 - *Open*
- Jan 10/11, 2008 - President's Night
- Feb. 7, 2008 - Scott Walker
- Mar 13, 2008 - *Open*
- Apr 10, 2008 - Student Night
- May 8, 2008 - *Open*

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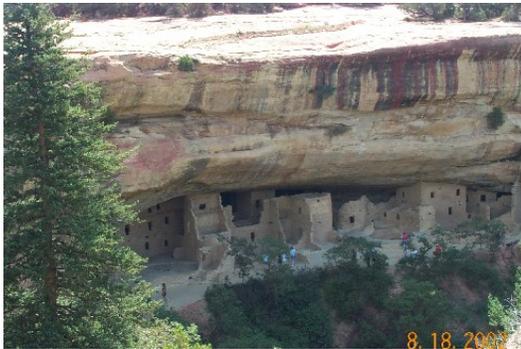
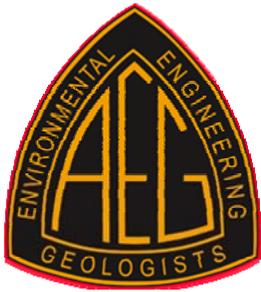
Student Chair

Diana Cook
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Past Chair

Liv Bowden

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