Association of Environmental & Engineering Geologists
San Francisco Bay Area Chapter

ANNOUNCING OUR MAY 2017 MEETING:
(NOTE: WEDNESDAY MEETING!)

CHEMICAL MODIFICATION OF SOILS

By: **DALE ANDREWS, PG**
AEG President
Senior Technical Advisor, R&D/Construction Markets
Carmeuse Lime & Stone

MEETING DETAILS

Restaurant	**Date and Time**
Spice Monkey	Wednesday, May 10, 2017
1628 Webster Street	6:00 pm—Social Hour and Sign-in
Oakland, CA	6:45 pm—Dinner
Map	7:45 pm—Presentation

Cost:
$45 Members & Members spouses
$55 Non-Members
$20 Students

Menu: No advance menu choice requirement

Reservations*: To RSVP, please fill out the online form by **12 PM, Monday, May 8**

Driving Directions: Print turn-by-turn directions through Google Maps

Parking: Street parking in Oakland is free after 6pm. A small parking lot is available alongside the restaurant.

Transit Options: The restaurant is located just 2 blocks from the 19th street Oakland BART station. Exit the 19th Street Station from the 18th Street side, walk south on Broadway until you reach 17th Street, turn left on 17th Street and walk two blocks to Webster Street. The restaurant is on the corner of 17th Street and Webster.

*Please RSVP in advance. Walk-ins are welcome, but not guaranteed. No shows will be charged.

See next page for abstract and speaker biography.

Dale Andrews earned his Master's Degree in Engineering Geology from Kent State, Ohio and is a registered Geologist in the state of Pennsylvania. Dale began his technical career as a geotechnical consultant and project manager within the transportation group of Gannett Fleming, a dynamic infrastructure solution and construction management service focused firm. After nearly a decade with Gannett Fleming, Dale accepted an offer to work for Carmeuse Lime & Stone. Carmeuse is a global leader in the production of lime and limestone, producing up to 7 million tons of lime, 12 million tons of high quality chemical grade limestone, and 15 million tons of quality aggregates per year in North America alone. Dale is currently Carmeuse's lead technical advisor and R&D manager for all of their construction and stabilization/solidification opportunities as well as their entire milled products' portfolio. Collectively, Dale has twenty years of experience in chemical stabilization of soil, solidification of waste, construction aggregate and filler applications, dredged material remediation, slope instability mitigation, foundation design, erosion control, landfill management and construction testing. Dale is also the current president of the Association of Environmental and Engineering Geologists (AEG).

Abstract - Soil drying, modification and stabilization incorporate different methods for altering the properties of soil to enhance its physical properties and engineering performance. Soil stabilization is utilized for a range of engineering tasks, the most well-known application being in the road construction and airfield pavements, where the primary goals are to dry the soil, improve the soil engineering properties and to lessen the development cost by making best utilization of locally accessible materials. In addition to improving strength, stabilization can provide erosion control, pH adjustment, and permeability reduction.

This presentation will outline the many benefits of utilizing chemicals, such as lime, in soil and explain how they are achieved. It will provide guidance on when chemical modification makes sense technically and financially and how to select the right chemical for a job. Additionally, it will provide an overview on applicable laboratory testing and how to best ensure their results will mimic field conditions. Finally, it will close by outlining the best field practices for incorporating chemical into the soil at the job site.

Thank you for the RSVP! See you on Wednesday, May 10, 2017!