



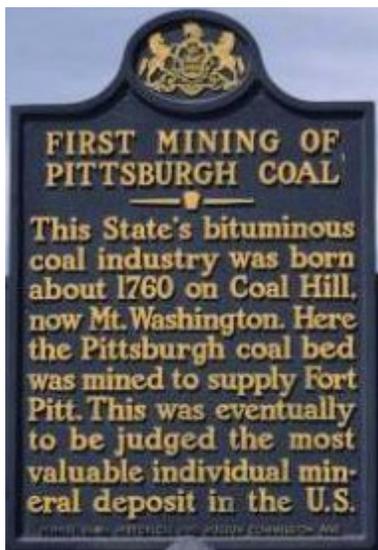
**THE ASCE PITTSBURGH SECTION
GEO-INSTITUTE CHAPTER PRESENTS
A JOINT MEETING WITH
THE PITTSBURGH GEOLOGIC SOCIETY**



Impacts of Mining on Structures in Western Pennsylvania

Presented By: *Richard E. Gray, P.G., Principal, DiGioia, Gray & Associates, LLC*

Shortly after General Forbes captured Fort Duquesne in 1758, British soldiers began mining the Pittsburgh Coal from Coal Hill (Now Mt. Washington) across the Monongahela River from Fort Pitt.



Coal mining has been widespread in Western Pennsylvania and has to be considered in any site investigation in the region. In areas of shallow cover over old mines sinkholes are common. Trough subsidence can occur where the cover is greater both above abandoned and active mines. Subsidence related to active mining is reasonably understood, permitting us to predict the time and amount of movement and surface strains.

Above abandoned mines there are no means available as yet to predict exactly when or where subsidence might take place; and so subsidence must generally be expected anywhere unless it can be proved that the area has not been mined, that long term pillar support has been provided or that the mine voids are fully collapsed.

Recent recognition of non-conventional surface ground behavior induced by underground mining necessitates consideration of possible damage to structures positioned as struts across valleys.

Please join us for this joint meeting on **Wednesday January 21, 2015**, hosted by our Pittsburgh Geologic Society (PGS) colleagues at Foster’s Restaurant, Foster Plaza Building 10, Green Tree. Registration for all participants is being offered through PGS. Please refer to the instructions below.

Attendance at this technical presentation qualifies participants for 1.0 PDH

PLEASE RSVP BY Friday January 16, 2015.

Date: **Wednesday January 21, 2015**
Time: 6:00 PM Social (BYOB mixers provided)
7:00 PM Dinner
8:00 PM Presentation

Cost: \$25 / Person
\$5/ Students

Place: Fosters Restaurant
680 Anderson Drive,
Building 10
Pittsburgh, PA 15220

Registration Options:
E-mail: title "PGS Dinner Reservation"
to pgsreservations@gmail.com
Website: using PayPal at:
<http://www.pittsburghgeologicalsociety.org/>