### Wednesday, February 13, 2019

## HGS Environmental & Engineering Dinner Meeting

Black Lab Pub, Churchill Room • 4100 Montrose Blvd. Social Hour 5:30–6:30 p.m. Dinner 6:30–7:30 p.m.

#### Cost: \$30 Preregistered members; \$35 non-members/walk-ups

To guarantee a seat, pre-register on the HGS website & pre-pay by credit card. Pre-registration without payment will not be accepted. Walk-ups may pay at the door if extra seats are available.

If you are an Active or Associate Member who is unemployed and would like to attend this meeting, please call the HGS office for a discounted registration cost. We are also seeking members to volunteer at the registration desk for this and other events.

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# Overcoming Challenges for Successful Environmental Outcomes in Indonesia, Lessons for Work in Developing Countries

Recent projects have led to a better understanding of the limitations, obstacles and advantages that accompany investigating and delivering risk-based contaminated site management and remedial technologies to environmental work in Indonesia. For instance, non-technical regulatory limitations need to be overcome as the Ministry of the Environment and Forestry has recently started to impose environmental clean-up directives based on the current environmental regulations. Theses groundwater and soil regulations are interpreted somewhat vaguely, providing additional challenges of stakeholder negotiation and advocacy when implementing environmental site strategies. Additional logistical challenges from drilling to procurement of equipment to weather abound.

A review of challenges and advantages encountered to successfully complete work include, regulatory policies that are in development can be challenging to interpret, weather leading to flooding/Health and Safety issues, resourcing, supplies, equipment, accomadation of local customs/religious considerations, technical resource availability and mobility restrictions. Challenges also include importing equipment and local availability/quality, opportunistic theft and lack of environmental constructors. The use and availability of quality affordable labor along with determined problem solving have helped overcome those challenges.

Strategic use of the available resources and ingenuity along with stakeholder engagement overcoming challenges has led to successful environmental outcomes. Learning to work with and around these obstacles provides good lessons that can be applied for similar work in developing countries.

#### **Biographical Sketches**

**BRENDAN BRODIE** is a Technical Director within ERM based in Sydney, New South Wales, Australia. He is currently undertaking a role in the management and technical support of remedial projects and advanced assessment techniques for ERM's Asia/ Pacific Oil and Gas, Industrial, Power and Governmental clients. He is a registered licensed professional geologist and has two geological science degrees from the University of South Carolina in the United States. Prior to joining ERM in Australia, he co-founded and managed EnviroSouth Environmental Consultants from 2001 to 2013 and EarthCon Drilling and



Construction from 2005 to 2012 and has a total of 21 years in the environmental consulting and environmental construction fields.

**TROY MEINEN** is a Technical Director and Global Health and Safety Advisor with ERM in Houston. Over his 20-year career, he has worked on a wide variety of industrial facilities and upstream oil and gas projects to address contaminated ground water, soil and sediment issues. His background includes managing investigation and remediation of upstream



oil and gas sites and assisting with due diligence for large oil and gas acreage position transactions for major Oil and Gas clients, which includes assessment of water use and protection, property transaction support, environmental impact assessment, environmental permitting and management, and Stakeholder concerns. He currently utilizes his field experience to support teams globally in improving health and safety performance in key ERM accounts.

