

SUCCESSFULLY MANAGING HORIZONTAL DIRECTIONAL DRILLING, SLOPE STABILIZATION AND LANDSLIDE MITIGATION

JUNE 20, 2018

The Appalachian Basin has some of the most challenging topography in the country. This area also has an abundance of streams and wetlands that need to be protected. These factors make it crucial for all stakeholders engaged in pipeline construction to plan and execute effectively and responsibly.

Join oil and gas industry stakeholders to cover two topics. First the training will provide a comprehensive overview on how pipeline horizontal directional drilling (HDD) operations are planned and executed. Second the training will cover slope stability and construction techniques.

Engineering experts, contractors and operators will share how they have successfully completed HDDs, while planning for and mitigating inadvertent returns. These experts will also discuss slope stability in landslide prone areas which is also a critical issue for pipeline construction. They will cover a variety of topics including geohazard assessments and construction techniques utilized during pipeline construction and how to mitigate, should a landslide occur. In addition, Pennsylvania Department of Environmental Protection (PA DEP) representatives will review regulations and permits that govern HDD operations and their biggest concerns related to landslides.

PROGRAM

8:00 am – 8:30 am	Registration and Continental Breakfast
8:30 am – 9:15 am	HDD Planning, Siting, and Design
9:15 am – 10:00 am	HDD Construction and Managing Inadvertent Returns
10:00 am – 10:15 am	Break
10:15 am – 11:00 am	HDD Regulation and Permit Overview
11:00 am – 11:45 am	Fundamentals of Soil Mechanics and Slope Stability
11:45 am – 12:45 pm	Lunch
12:45 pm – 1:45 pm	Slope Stabilization Techniques for Pipelines: Concepts
1:45 pm – 2:45 pm	Slope Stabilization Techniques for Pipelines: Case Studies
2:45 pm – 3:00 pm	Break
3:00 pm – 3:45 pm	Landslide Examples
3:45 pm – 4:30 pm	Landslide Mitigation Techniques

7.5 PROFESSIONAL DEVELOPMENT HOURS AVAILABLE

REGISTER

MSC Member:	\$200
MSC Member Group Rate*:	\$175
Non-Member:	\$250
Non-Member Group Rate*:	\$225

* Receive discounted rate when registering four or more attendees from one company.

Admission fees are non-refundable. Substitutions are accepted.

WWW.18HDD.EVENTBRITE.COM

LOCATION

Hilton Garden Inn
Pittsburgh/Southpointe
1000 Corporate Drive
Canonsburg, PA 15317

A block of rooms has been reserved at the Hilton Garden Inn under the Marcellus Shale Coalition on a first-come, first-served basis. Please call 724-743-5000 to make a reservation.

For more information and other training opportunities, please visit www.marcelluscoalition.org/get-involved or contact Sarah Braun, Events Manager, at sbraun@marcelluscoalition.org.

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SESSION DETAILS

HDD Planning, Siting, and Design

AECOM will discuss HDD planning, siting, and design with a focus on geologic threats to successful installations that are unique to the tri-state region. Attendees will work through geology review, project siting, geotechnical studies, pipeline engineering evaluations, and the development of a risk profile. Presenters will then provide a series of regional case studies and their engineered solutions.

Steven Ladavat, PG, Geotechnical Project Manager, AECOM
Robert A. Marszalkowski, PE, Project/Program Manager and Senior Civil Engineer, AECOM

HDD Construction and Managing Inadvertent Returns

In the diverse geology of the Appalachian Basin, transitioning a Horizontal Directional Drill (HDD) from design to construction is a critical part of the project life cycle. Properly executing the HDD construction is equally important. This session will detail the importance of HDD pre-construction planning, active HDD construction management and steps that can be taken to successfully install HDDs while proactively managing the risk of inadvertent returns.

Webb Winston, PE, Principal Engineer, Williams

HDD Regulation and Permit Overview

During this session, The Pennsylvania Department of Environmental Protection (PA DEP) will provide an overview on regulations and permits that govern HDDs and the oil and gas industry. They will focus on areas where industry needs to improve on HDDs and how operators should coordinate with PA DEP when an inadvertent return occurs.

Domenic Rocco, PE, Acting Environmental Program Manager, Pennsylvania Department of Environmental Protection

Fundamentals of Soil Mechanics and Slope Stability

The fundamentals of soil mechanics are important to understand when undertaking any earth disturbance activity in Appalachia. This session will provide a brief overview on the importance of understanding soils and why employing accepted theories and calculations are critically important to slope stability and the success of a design.

Luis E. Vallejo, Professor, Department of Civil & Environmental Engineering, University of Pittsburgh

Slope Stabilization Techniques for Pipelines: Concepts

This session will discuss slope stabilization technique concepts that aim to mitigate slope instability hazards to pipelines. Topics covered will include soil and rock mechanics fundamentals for development of mitigation approaches, phased site-specific investigations for development of slope stability mitigation affecting pipelines, stability analyses and evaluations, slope stabilization and mitigation techniques, and monitoring programs.

Rodolfo B. Sancio, Ph.D., PE, D.GE, Senior Principal Engineer, Geosyntec Consultants, Inc.
Logan Brant, Ph.D., PE, Senior Engineer, Geosyntec Consultants, Inc.

Slope Stabilization Techniques for Pipelines: Case Studies

Slope stabilization techniques can often be complex which lead to a variety of causes and remediation methods to better understand and manage slope instability. This session will present a number of case studies surrounding slope instabilities, remediation methods, and some of the construction challenges associated with them.

Scott Kibby PE, Principal Engineer/Associate, Mott MacDonald

Landslide Examples

Landslides are common in Pennsylvania and have occurred on oil and gas pipeline projects. The PA DEP will highlight concerns and case studies on landslides and provide information for how the industry can work with PA DEP to safely remediate them. Additionally, they will provide an overview on the current regulations that govern landslide remediation for oil and gas projects.

Will Brogan, PhD, Aquatic Biologist, Permitting and Technical Services Section, District Oil and Gas Operations, Southwest Regional Office, Pennsylvania Department of Environmental Protection
Mohamed Sam, Environmental Engineering Specialist, Oil and Gas Management, Southwest Regional Office, Pennsylvania Department of Environmental Protection

Landslide Mitigation Techniques

Landslides occurring on pipeline right-of-ways after restoration are costing midstream companies millions of dollars per year to repair. Geo-hazard assessments, routing evaluation, special construction techniques, and geotechnical inspections are becoming more prevalent as the industry attempts to better understand and mitigate landslide risks. This presentation will discuss the current methods being employed to identify geo-hazards and reduce the risk of landslides occurring on right-of-ways.

Michael L. Schumaker, PE, Principal, Civil & Environmental Consultants, Inc.