Day One - Track Two
Wednesday, March 21st, 2018
9:00 a.m. – 9:30 a.m.

Biotic Soil Technology for Sustainable Erosion Control and Revegetation – Successful Case Studies

Presenters: Matthew Welch and Marc Theisen, Profile Products LLC.

Biography

Matthew Welch, CPESC, CESSWI, is the Technical & Business Development Manager for Profile Products, LLC, of Buffalo Grove, Illinois. Matthew heads up Profile Products Free Soil Testing program and online design software – Profile Soil Solutions Software (www.ProfilePS3.com) and works closely with specifiers to ensure that all erosion and sediment control plans, involving Profile's line of products, will have a high rate of success.

Marc Theisen, M.S., CPESC, CPSWQ, CESSWI is Vice President of Business Development and Technical Services for Profile Products, LLC. Marc has extensive global experience in erosion and sediment control working on energy, mining, infrastructure and construction related projects over six continents. He manages the development and technical marketing of a comprehensive family of erosion control, sediment control, agronomic amendment and storm water treatment technologies.

Abstract

Successful rehabilitation, reclamation or revegetation of soil and vegetation disturbances from resource extraction or construction related activities require a comprehensive and holistic approach. All too often, the post-disturbance response is concentrated on effective erosion and sediment control measures with little regard to the underlying soils or substrates and their agronomic potential to establish and sustain vegetation. Surveys and observations conducted by the author have confirmed that nearly three-quarters of North American erosion control and revegetation project designs fail to test and then prescribe remediation of soils or substrates to foster their ability to establish and sustain vegetation. Moreover, scarcity, cost and quality of suitable topsoil, as well as compost and other prescribed soil alternatives can exacerbate the challenge. Biotic Soil Technology (BST) is a generic term to describe the emerging field of manufactured growth media that is engineered to cost-effectively increase organic content in substrates, accelerate sustainable vegetative establishment and promote regeneration of denuded soils. BSTs offer many advantages over field extracted or produced soils and their replacements such as availability and consistency of material and efficiency of application. This publication will discuss a diverse portfolio of case studies in North America and abroad where BSTs have been implemented to facilitate successful erosion control and revegetation outcomes.

Learning Objectives

1. Learn how/when Biotic Soil Technologies are a viable replacement for topsoil/compost;
2. Learn how to test soils for organic content and select proper BST application rates to ensure success on your site; and
3. Review the variables needed to calculate and estimate costs of BST versus using topsoil/compost placement to determine the cost benefits.