GSI W-12 Webinar Entitled:

"Landfill Covers: Past-Present-Emerging"

Webinar Overview

Participants will be able to assess past landfill cover practices and gain comparisons to present practice as required by the U. S. Environmental Protection Agency through RCRA and Superfund regulations. That said, these regulations are ca. 25-years old and have not been updated insofar as geosynthetics are concerned. This leaves individual states to implement current practices. The implementation of drainage geocomposites and geosynthetic clay liners are noteworthy in this regard.

Most interesting are emerging cover concepts such as exposed geomembrane covers, solar panel coverings, artificial turf coverings and myriad post-closure beneficial uses such as

- golf courses and driving ranges
- other sport related uses
- facilities with transient loads
- facilities with permanent loads
- outdoor artworks/sculpture parks

Learning Objectives

Participants will become familiar with the various components included in final covers of solid waste landfills. By so doing they will gain perspectives of how to extend the concept with new geosynthetic solutions in an environmentally safe and secure manner.

Webinar Benefits

1. Understand the historical advancements from past-to-emerging landfill closure methodologies
2. Understand the basic elements of a final closure system
3. Understand related technical issues such as settlement, gas collection, exposed geomembrane lifetime, barrier material idiosyncrasies, etc.
4. Understand the status and scope of abandoned and/or closed landfills
5. Become familiar with the myriad uses of such landfills in a generally beneficial manner
6. Appreciate that such usage goes beyond technical issues in that transference, regulatory, legal and public acceptance issues must also be addressed

Intended Audiences

Public and private owners/operators of landfills, heap leach pads, shale gas cuttings, combustion coal residuals and related solid waste facilities; consultants and designers in the public and

private sector; regulators and agency personnel at the federal, state and local levels; geosynthetic manufacturers and their representatives; geotechnical and geosynthetic testing organization personnel; contractors and installers of liner and cover systems; academic and research groups; and others desiring technically related information on this important aspect of our constructed environment.

Specific Topics Covered

1.0 Concept and Goals
2.0 Past Practices
3.0 Present Status
4.0 Emerging Final Covers
5.0 Summary and Conclusions

Webinar Instructor

Dr. George R. Koerner is the current director of the Geosynthetic Institute, a position that he has held since 2014. George's interest in geosynthetics spans his entire professional life from undergraduate work in the 1980's to the present. He holds his PH.D. in Civil, Architectural and Environmental Engineering from Drexel University in Philadelphia. George's master thesis was on direct shear testing of geosynthetic interfaces and his doctoral dissertation was on landfill leachate clogging of soil and geosynthetic filters. Both are regularly cited to this day.
Dr. George Koerner is a Professional Engineer in both Pennsylvania and New Jersey, and is an ASQC Quality Auditor. During his 30-years of geosynthetic activities, Dr. Koerner's output has been tremendous and he has to his credit the following publications:

- Books Edited or Co-Edited – 15
- Journal Papers – 18
- Symposium and Conference Publications – 40
- Book Chapters and Published Reports – 4
- Miscellaneous Articles – 30

The Geosynthetic Institute is a nonprofit research and development organization dedicated to the proper use of geosynthetics in its myriad applications. As director of the Geosynthetic Institute, Dr. George Koerner is also in charge of the laboratory accreditation and inspection certification programs.