

GSI W-13 Webinar Entitled:

“Beneficial Uses of Abandoned and/or Closed Landfills”

Webinar Overview

There are currently about 7000 closed and/or abandoned landfills in America and countless others around the world. They invariably stand as fenced-off monuments to our waste disposal practice and represent nonused space which is often in desirable locations. This webinar describes the current situations and the desirability for post-closure landfill beneficial uses. Examples are given in categories of golf courses, sporting activities, facilities with transient loads, facilities with permanent loads, and outdoor artworks.

Technical issues which must be addressed for successful uses are presented as six separate issues. They are total settlement, differential settlement, accommodation of utilities, gas emissions, leachate seeps and erosion control prevention. Each are explained with several numeric examples. The webinar ends with related issues such as monitoring, transference of ownership, legal issues and public acceptance. Conclusions regarding both technical and non-technical issues are offered accordingly.

Learning Objectives

Participants will understand the nature of the topic vis-à-vis its current undesirable status. Numerous examples where success has been achieved will be offered. Technical issues which must be properly addressed are settlement, fugitive gas, leachate outbreaks, and proper design for utilities and maintenance control. They are explained accordingly.

The webinar also addresses non-technical issues which are very important in this particular endeavor. They are monitoring, ownership transference, regulatory issues, legal considerations and marketability. Clearly, the current status of nonuse is not sustainable going forward.

Webinar Benefits

1. Understand the status and scope of abandoned and/or closed landfills
2. Become exposed to the myriad uses of such landfills in a generally beneficial manner
3. Understand the nature and amount of total and differential settlement that occurs with municipal solid waste as it ages and degrades
4. Appreciate the negative aspects that fugitive gas and/or leachate outbreaks can have on post-closure facilities
5. 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, 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 Introduction and Overview
- 2.0 Examples of Current Uses
- 3.0 Technical Issues
- 4.0 Non-Technical Issues
- 5.0 Summary and Conclusions

Webinar Instructor

Dr. Robert M. Koerner's (Professor Emeritus of Civil Engineering at Drexel University and Director Emeritus of the Geosynthetic Institute) interest in geosynthetics spans over thirty years of teaching, research, writing and advising. He holds his Ph.D. in Geotechnical Engineering from Duke University. He is a registered Professional Engineer in Pennsylvania, a Distinguished Member of ASCE, a Diplomate of the GeoInstitute and a member of the National Academy of Engineering. Bob has authored and co-authored about 650 papers on geosynthetics and geotechnical topics in journals and at national and international conferences. His most widely used publication is the sixth edition of the textbook entitled "*Designing with Geosynthetics*". He is the founding director of the Geosynthetic Institute which is a nonprofit research and development organization dedicated to the proper use of geosynthetics in its myriad applications. The institute also provides laboratory accreditation and inspection certification programs.