

Short Course:
QC/QA of Geosynthetics

George Koerner, *Geosynthetic Institute (GSI)*
Sam Allen, *Texas Research International (TRI)*
Mark Sieracke, *STS Consultants*

- AGENDA -

7:30-8:00am	Registration	
8:00-8:15	Welcome and Introduction	Allen
8:15-8:30	QC/QA Principles and Philosophy	Sieracke
8:30-9:30	Background Geosynthetic and Manufacturing	Koerner
9:30-10:30	Shipping and receiving, unloading, storage & handling	Allen
10:30-10:45	Break	
10:30-11:30	Installation and seaming	Sieracke
11:30-12:15	GCLs	Koerner
12:15-1:00pm	Lunch	
1:00-2:00	Geotextiles	Allen
2:00-3:00	Geonets and geocomposites	Sieracke
3:00-3:15	Break	
3:15-4:15	The details (appurtenance, nondestructive testing etc)	Koerner
4:15-4:45	Paperwork and record keeping	Allen
4:45-6:30pm	Tour of TRI ?	

Target audience:

Engineering consultants that perform QC/QA services, federal, state, regional personnel that oversee projects and owner representatives of waste containment facilities.

Summary of Handouts:

Handouts of power point presentation (over 150 slides) will be handed out at the short course to all participants. In addition, selected Manufacturer's literature will be available in the back of the room on first come first served basis.

CEUs: 0.8 to be given out by GSI for all that complete the course.

When:	Sunday January 23, 2005	Registration fee:	\$300.00
Where:	Hilton Austin 500 East 4th Street Austin, TX 78701	Special registration fee for <u>full-Conference registrants:</u>	per person \$ 50.00 per person
http://www.asce.org/conferences/geofrontiers05/		<ul style="list-style-type: none"> • Registration includes refreshments, lunch, handouts • Participants receive 7 PDHs 	

ABOUT THE COURSE

This one-day course focuses on the quality control and quality assurance of geosynthetics as placed in permanent and critical applications. The course emphasizes manufacturing and installation. QC/QA are widely recognized as critically important factors in overall quality management of waste containment facilities. The best of designs and regulatory requirements will not necessarily translate to waste containment facilities that are protective of human health and the environment unless the facility is properly constructed with first quality materials. The course covers, CQA principles and plans, field tests and observations, the importance and discipline of CQA documentation, material acceptance and storage, installation of clay and GCL liners, geomembranes, geotextiles, geocomposites, geogrid and geopenance, seaming of geomembranes and geotextiles, sampling plans, patterns and documentation, geomembrane seam testing, review of test results and nondestructive testing.

ABOUT THE INSTRUCTORS

George Koerner, Ph.D., P.E. & CQA is Associate Director of the Geosynthetic Institute (GSI) in Folsom, PA. He is in charge of Laboratory accreditation, product certification and test method development at GSI. He also is a project manager and has published over 75 technical papers in his 20-year association with geosynthetic. George's Ph.D. is from Drexel University in Geotechnical Engineering. He is a registered professional engineer in Pennsylvania and New Jersey as well as an ASQ Certified Quality Auditor. George has had involvement with over 350-geosynthetic projects worldwide. He served as a Technical Reviewer of USEPA Technical Guidance Document: QAQC for Waste Containment Facilities (EPA/600R-93/182, Sept. 1993) and was editor of the NICET exam for QA/QC of geosynthetics.

Mr. Allen, P.E. is the Vice President of the Texas Research International (TRI) Geosynthetic Services Division. Sam is the Chairman of Committee D35 on Geosynthetics within ASTM. Sam is also serves on the Technical Advisory Board of GFR, and is special advisor to the "In the Lab" column presenting testing issues. Sam currently serves on the Board of Directors of the GSI.

Mark Sieracke, P.E. is an industry recognized expert in the fields of landfill design and CQA. Mar serves as a Principal and Solid Waste Practice Area Manager at STS consultants. While at STS, Mark served as a Technical Reviewer of USEPA Technical Guidance Document: QAQC for Waste Containment Facilities (EPA/600R-93/182, Sept. 1993). Mark was also involved in the development of the questions used for NICET program for QA/QC of geosynthetics. Mark has served as a hands-on CQA practitioner, certifying engineer and as a consultant for over 1,000 acres of geosynthetic installation. He also provides mediation services on behalf of the American Arbitration Association for resolving landfill construction issues. He contributes routinely to landfill failure investigations and constructability reviews for design engineers. Mark currently serves on Waste Management's Geosynthetic task force creating its corporate standards for CQA.

ABOUT THE SPONSOR

This course is sponsored by the Geosynthetic Institute (GSI). Information on GSI can be found at <http://www.geosynthetic-institute.org/>