



Newsletter - Fall 2025

New FGI Short Course: Online Welding Basics

This December 2025 short course will focus on the basics of welding geomembranes and understanding how to achieve a suitable weld quality, using thermal fusion welding technologies. e.g., hot wedge and hot air, and hand extrusion welders. In particular, the course will focus on: (1) welding different geomembrane polymers, (2) types of welding and equipment selection, (3) welding parameters, and (4) importance of seam testing. The following people should consider attending: engineers, regulators, CQA personnel, installers, fabricators, and end users.



[Part 1 - Dec. 2, 2025: Welding Different Geomembrane Polymers](#)

[Part 2 - Dec. 4, 2025: Types of Welding and Equipment Selection](#)

[Part 3 - Dec. 9, 2025 : Welding Parameters](#)

[Part 4 - Dec. 11, 2025: Importance of Seam Testing](#)

Course Sessions are from Noon - 1:30 pm CST each day

Register for Each Session Separately - Free to Industry Professionals & Students

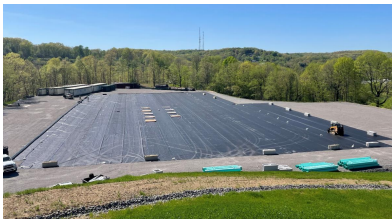
1.5 PDH available per session (6.0 PDH Total Available)

Presenters:

Eddie Weiser (Leister Technologies)

Gus Fauci (DemTech)

Timothy D. Stark, Ph.D, P.E., (University of Illinois Urbana-Champaign)



FGI Project Spotlight: Oil & Gas Containment in Marcellus/Utica Shales

FGI Member Company: Inland Tarp & Liner (ITL)

Geomembrane Application: Well Pad Containment

Size of Project/Ft² of Material: 76,752 sq. ft.

Materials Used: 60 mil thick Coated Woven Polyethylene (CWPE) geomembrane with felt lamination surface for safety purposes

The 60 mil thick CWPE geomembrane, referred to as 60XGL, is a 6 ply material that includes a geotextile safety or traction layer (GL). This layer is added to the top of a 5 ply CWPE Double Scrim (X) geomembrane with a coating between the scrims plus a coating on the top and bottom. This provides high tear strength, puncture resistance, and Mullen burst pressure.

The CWPE is made from woven High Density Polyethylene (HDPE) tapes known as "base fabric" or "scrim" which creates the high tear strength and puncture resistance. The HDPE scrim layers are coated on both sides with LLDPE to provide flexibility for liquid containment applications.

Project Description:

The 60XGL geomembrane was efficiently and effectively installed for this oil and gas development well pad to meet regulatory requirements in Pennsylvania. A well pad drawing was initially provided to ITL as to where the inside containment needed to be constructed but no details were provided. The geometry for this containment area utilized eight-inch triangle open cell foam to create a containment berm around the entire perimeter, which was factored in to ITL's overall geomembrane design. ITL asked to design the containment berm to optimize geomembrane deployment after factoring in personnel and equipment

resources. The final geomembrane layout consisted of six custom factory fabricated panels of 60XGL geomembrane. These six panels resulted in only five field welds being needed to complete the containment system.

How the Use of Factory Fabrication Improved this Project

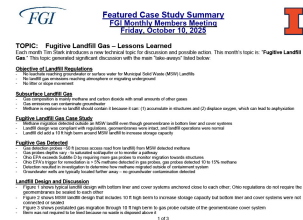
The entire geomembrane installation was completed in one day, which included all five field welds of the factory fabricated panels and berm construction with a crew of six. Compared to field welding all of the geomembrane seams, which would have needed a weld every 12 feet because that is the width of the CWPE geomembrane. Custom factory fabrication of the panels and modular design resulted in only five total field welds with no material waste.

Due to extreme summer heat, the crew was happy to have the installation completed in just one day. Risk of failing seam tests was also reduced because only five field welds were needed, and the installation was efficient and easy with all panels being labeled in a panel layout diagram to facilitate placement. Custom factory fabrication drove installation costs down compared to field welding a 12 foot wide roll stock version of the CWPE geomembrane. Custom fabrication also helped this producer meet their Environmental, Social, and Governance initiatives.

Full Project Spotlight (including Lessons Learned & Photos)

Featured Case Study

Each month during the FGI's Membership Teleconference, Tim Stark alternates introducing a new technical topic or a featured case study for discussion and possible action. October's featured case study was: **"Fugitive Landfill Gas"**. This topic generated significant discussion. The white paper, including photos, can be viewed/downloaded from the FGI Website.



Download FGI Case Study: Fugitive Landfill Gas



November Webinar: Carbon Emissions Quantification and Sustainability Aspects of Landfill Final Cover Systems

A detailed quantification and comparative analysis of carbon emissions for the following three landfill final cover systems will be presented: (1) soil-only cover; (2) soil-geosynthetic cover; and (3) an engineered turf cover. Various sustainability aspects and potential environmental considerations for landfill cover systems, such as, land disturbance, borrow areas, water use, water quality, health and safety, and incremental closures will be discussed. Opportunities and operational activities that can be adopted to reduce greenhouse gas emissions with the use of cover systems will also be discussed. 1.0 PDH

Presenter:

Rutu Joshi, P.E. (Watershed Geo)

[November 13, 2025 at Noon CST \(Live\)](#)

[November 14, 2025 at Noon AEST \(Pre-recorded - Australia\)](#)

[November 14, 2025 at Noon CAT \(Pre-recorded - South Africa\)](#)

[November 17, 2025 at 5 pm JST \(Pre-recorded - Japan\)](#)

Register for FGI's November Webinar

University of Illinois - FGI Online CQA Course & Certification On-Demand

If you missed the live offering of the FGI's Online Course and Certification Exam on

Manufacturing, Fabrication, & Installation for QA/QC for Geosynthetics, we have you covered. All five parts of the course were recorded and are now available to participate at your convenience in an on-demand course format. The on-demand course will be offered monthly. The five course sessions will be available the first three weeks of each month, with the certification exam available to take online during the last week of the month. The five course sessions are: Part 1 - Manufacturing MQC & MQA, Part 2 - Subgrade Preparation, Part 3 - Factory CQC & CQA, Part 4 - Field CQC & CQA, and Part 5 - Post Installation Maintenance & Leak Location.



Cost \$500 (includes five course sessions and online certification exam)
\$300 (includes five course sessions only, used code: NOEXAM200)
Regulators/government employees, use code REGULATOR

[November Online CQA Course & Certification - On-Demand Registration](#)
[December Online CQA Course & Certification - On-Demand Registration](#)
[January Online CQA Course & Certification - On-Demand Registration](#)

Contest Description: Hidden throughout our website are 5 special fall leaves (see image), each one on a different page. Click on each leaf to reveal a new clue that will guide you to the next page. The timer starts the moment you find your first leaf.

How to Win: The fastest three participants to successfully complete the hunt will win Amazon gift cards valued at \$75, \$50, and \$25!

How it works: Track your progress with the counter at the top of the screen. Once you have found all 5 leaves, (1) screenshot your completion message, (2) email it to fgihunt@gmail.com, (3) and fill out the form to officially enter.

Start Here: <https://www.thefgi.org/#hunt>

FGI's Fall Website Scavenger Hunt

FGI Website Fall Scavenger Hunt: Win an Amazon Gift Card

Contest Description: Hidden throughout FGI's website are 5 special fall leaves, each one on a different page. Click on each leaf to reveal a new clue that will guide you to the next page. The timer starts the moment you find your first leaf.

How to Win: The fastest three participants to successfully complete the hunt will win Amazon gift cards valued at \$75, \$50, and \$25!

How it works: Track your progress with the counter at the top of the screen. Once you have found all 5 leaves, (1) screenshot your completion message, (2) email it to fgihunt@gmail.com, (3) and fill out the form to officially enter.

Start Here: <https://www.thefgi.org/#hunt>

**Start FGI Website Scavenger
Hunt**

FGI's Website - #1 Resource for Flexible Geomembranes and Factory Fabricated Panels

- Online PDH Credit Program
- Installation Details & Drawings
- Audio and Video Podcast Series
- Geo-Engineering Pop Quizzes
- Pond Leakage Calculator
- Panel Weight Calculator
- Webinar Library
- Project Spotlights
- Member Directory
- Latest Specifications & Guidelines
- Material and Equipment Guides
- Videos of ASTM Factory & Field Test Methods
- Technical Papers & Journal Articles
- Industry News and Events
- Photo and Video Gallery



Visit our

Flexible Geomembrane Institute | Jen@thefgi.org | www.thefgi.org | 217 333-3929

STAY CONNECTED



Flexible Geomembrane Institute | Dept. of Civil & Environmental Engineering University of Illinois at Urbana-Champaign 205 N. Mathews Avenue | Urbana, IL 61801 US

[Unsubscribe](#) | [Update Profile](#) | [Constant Contact Data Notice](#)



Try email marketing for free today!