

Refocusing Geomembrane QA/QC: IAGI's Panel Discussion at Geo2003

At the GeoSynthetics 2003 Conference and Exhibition in Atlanta the International Association of Geosynthetics Installers (IAGI) held a discussion panel to frame the need to refocus geomembrane QA/QC from the minutiae of destructive seam test analysis to the broader objective of thorough leak prevention. The consensus of those on the panel (including Bob Phaneuf, Mark Swyka, Kent Jett, John Heap, and Robert Koerner) and of the 120 industry people who participated in attendance, seemed to be that we have been largely “missing the forest for the trees”; that it is past time to climb up onto the mountain and look down on the whole forest of what we are doing; to get the big picture and not get lost in the detail of one aspect of liner quality, thinking that by focusing so heavily on destructive testing we are applying good quality control. For example, what is really the point of spending so much money and effort to cut large numbers of holes in modern dual track hot wedge welded seams in the containment footprint to be replaced by more error prone extrusion welding, at the same high frequencies used twenty years ago when extrusion welding dominated, especially when proven methods have existed to test entire lined areas for leaks?

As moderator Mark Cadwallader introduced the discussion topic with a little “GeoShakespeare” after tracking some of the history of improvements in heat seaming. As GeoHamlet might say:

Geo-Hamlet's Soliloquy

QC, or not QC, that is the question.
Whether 'tis nobler in the mind to suffer
The peels and shears of destructive testing,

Or take arms against leaks in geomembranes
And by preventing, end them.
To fly, to leap, to a new level of assurance.

To leap, perchance to dream.
Ay there's the rub;
To dream of better quality.

For why should we bear with extra patching?
The heartache and the thousand natural shocks
That cutting holes is heir to.

To cut and grind every 500 feet
Because the dread of something different
Makes us rather bear those ills we have,

Than move to others that we know not of.
The undiscovered country is a puzzle.
Should the unfamiliar make cowards of us all?

How then shall we proceed?
With better CQA and leak testing
Not just a bare bodkin.

Mark Cadwallader