

Total Containment Chronicles

A Biannual Review of our Commercialization Progress

Breaking Ground On a More Resilient, Safe, and Sustainable Pipeline Future

Pipeline Integrity Leadership • Harshes Environments • Diverse Applications • Cost-Effective Solutions



First Public Demonstration of Envirolock is a Success!

The [Pipeline Research Council International](#) (PRCI) [Technology Development Center](#) in Houston, TX hosted TCI for its first public demonstration of the Envirolock™ system on February 14, 2023. The specific objectives of the test were to provide proof of leak containment, operation with leak detection and to confirm that the application of Envirolock™ does not interfere with the operation of or results of pipeline integrity tools.

COO Jim Walsh supervised the installation of the system on the 12" loop over a 3-meter section with a 3/8" pre-drilled hole. The system was pressurized to 150 psi and "never budged", successfully showing that Envirolock™ can easily handle municipal applications and is ready for higher-pressure validation.

Industry representatives as well as PHMSA officials were on-hand to witness the demonstration. The Envirolock™ system stayed onsite for visitors to learn about during PRCI's Research Exchange Exhibition during March as well.

Bill Whitelaw Joins Board of Directors!

We were excited to welcome [Bill Whitelaw](#) to our Board of Directors in June 2023! He brings over 20 years of experience working with the energy industry, especially in the areas of communications, analytics, and sustainability. He also currently serves as the Managing Director for [geoLOGIC Systems Ltd.](#), chairs the [Canadian Society of Evolving Energy](#), advises the [Energy Futures Lab](#), and is an Associate for [Daily Oil Bulletin](#). Previously, Mr. Whitelaw's Board leadership supported the successful commercialization of [Pandell Technologies](#) and [Radicle](#). A long-time advisor to TCI, we are grateful for his continued commitment!

TCI Selected for Alberta Trade Mission

CEO Larry Young traveled to Warsaw, Poland on June 19-21, 2023 at the invitation of [Alberta's Trade, Immigration, and Multiculturalism](#) ministry. He participated in their Energy & Clean Tech Trade Mission to network with Polish and Ukrainian pipeline companies. Mr. Young reports that "many of the firms we met with believe our products will be very useful to install into next-gen infrastructure...specifically in terms of environmental security and safety."

TCI anticipates the European Union will be approving its patent application for Envirolock™ by the end of 2023. We are looking forward to offering operators in this region the chance to better protect their pipelines from external damage and the ecosystem from contamination.

"Just because something hasn't been tried before, doesn't mean it's not possible."

~Larry Young, CEO



Barbara Robinson Backs TCI!

We are delighted to share that Canada's leading sewer expert, [Barbara Robinson](#), has become an advocate for TCI's Envirolock™ system, and is advising our team as we bring it to market. She has over 30 years of engineering experience and has been extensively involved in formulating improved standards for preventing and mitigating Inflow & Infiltration ("I/I") problems in Canada's sewer systems.

TCI Hires Christine Smith as Technical Coordinator

[Ms. Smith's](#) responsibilities include grant writing, data analysis, and planning. She has a M.S. Environmental Mgmt. and is currently earning her MBA.

TCI uses its patented Envirolock secondary containment system to provide resiliency and environmental solutions for pipelines and other piping infrastructure. Contact us for more information at:

www.totalcontainment.ca • info@totalcontainment.ca • 587-984-1883 • Nisku, AB



News From the R & D Trenches



Certifications Moving Ahead, MITACS Partnership, Patent Awarded

“[NSF/ANSI/CAN 61 certification](#) ensures that...product[s] meet regulatory requirements across North America” for use in municipal water systems. TCI was excited to initiate the certification process for our innovative containment system in May! Many of Envirolock’s components are already approved for use in potable water and sewer applications, so we look forward to receiving the coveted NSF Mark for the complete system soon. This will open up crucial pilot project opportunities for TCI and our partners to demonstrate that Envirolock™ not only meets industry standards, but it sets a new standard for best practices in the water management field. *If you are a municipality interested in taking your operations to the next level, [contact us](#) today!*

The [ASME PCC-2 standard for Repair of Pressure Equipment and Piping](#) provides similar assurances to owners and operators working in the oil and gas, mining, CO₂, and H₂ sectors. TCI has selected [Stress Engineering Services](#) to conduct the PCC-2 testing on Envirolock™ and will be working with [Hingeneering Consulting](#) and [Red Deer Polytechnic](#) to provide additional support throughout the process.

TCI is also grateful to announce our new [MITACS](#) partnership with [Dr. Pierre Mertiny](#) and the [University of Alberta's Advanced Composite Materials Engineering Group](#). They are home to the most advanced robotic carbon fiber winding equipment in the province and will be helping us prepare for PCC-2 certification as well as conduct additional research.

Everyone likes getting encouraging mail, so in early June we were thrilled to see that our official patent approval for Envirolock™ from the [Mexican Industrial Property Institute](#) had arrived! Many thanks to all our supporters!

PICTURE IT! TCI Attends the [2023 AWWA conference!](#)

Total Containment Inc 3405
Total Containment Inc. was created to develop a “Pipeline Leak Containment System” called the Envirolock System. Envirolock protects the environment from pipelines and pipelines from the environment. It eliminates spills with an impenetrable and flexible physical containment barrier that contains leaks from breached primary piping. In other words, a leak can occur with out a spill or other environmental impact. This means emergency shutdowns become planned maintenance.



In The Pipeline....

- TCI requested \$3.7 million in funding through [Natural Resource Canada's carbon sequestration call for projects](#). An industry partner provided TCI with a Letter of Support for a joint pilot project in support of our EOI submittal.
- TCI has submitted a [Voucher Application to Alberta Innovates](#) requesting \$100,000 to support the Envirolock™ PCC-2 certification testing.
- Make your voices heard! The US Government is soliciting feedback on proposed pipeline leak rules by July 17th: [Submit a Comment!](#)

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