



# Atlantic PIRI in 2010: New Opportunities



Annual Report of Atlantic PIRI

April 2011

## Executive Summary – Atlantic PIRI in 2010

Atlantic PIRI is a regional multi-stakeholder, cross-jurisdictional discussion forum focused on issues related to contaminated site management. With a significant number of new members in 2010, the group built cohesion through two key areas of endeavor: the verification of the most recent update of the technical tool, the Atlantic RBCA software, to version 3; and further development of outreach and engagement with stakeholders. Their efforts provided new members with increased familiarity with Atlantic RBCA, and the function of Atlantic PIRI.

Technical aspects of Atlantic RBCA came under scrutiny as the software tool was updated to reflect land-use characteristics of Atlantic Canada and new guidance from Federal regulators. The software, its associated documentation and training are being prepared for public release. In addition, testing of the sediment toxicity criteria for EcoRBCA was completed and new guidance for screening ecological receptors is anticipated in 2011.

Creation of management tools that are reliable and easy to use for site owners, consultants and regulators is a key function of Atlantic PIRI. For regional consistency, it is useful to employ harmonized approaches. To that end, 2010 saw further use of the harmonized *Template for Closure Reports* and development of a new harmonized *Site Closure Submission Form*. The *Form* is included in version 3 of the *Atlantic RBCA User Guidance*. An overview of non-technical areas of existing harmonization was compiled, giving perspective on where more harmonization might be achieved, including opportunities for regulatory harmonization around brownfield redevelopment.

Atlantic PIRI continued its formal support of contaminated site regulatory initiatives in the region, specifically in Nova Scotia and New Brunswick. The regular meetings of the group continue to provide a forum for discussion of ideas, trends and challenges, to benefit all members. Supported by its strong technical core, and clear guidance on participation and the decision-making process, Atlantic PIRI was able to engage its many new members with a fresh approach in 2010. This has included more collaboration and interaction with non-technical stakeholders, such as insurers, who may still have questions about how the Atlantic RBCA process works.

In 2011, Atlantic PIRI is looking forward to more new opportunities, as well as:

- release of Atlantic RBCA version 3 software, *User Guidance* and online training;
- release of improved *Ecological Receptor Screening Guidance*;
- internal review of the *User Guidance for Soil Vapour and Indoor Air Petroleum Hydrocarbons*;
- internal review of a four-phase model option for the Atlantic RBCA toolkit;
- development of user guidance for assessment of volatile organic compounds;
- release of harmonized site closure reporting guidance;
- further work on development of regulatory harmonization opportunities;
- implementation of stakeholder outreach initiatives; and
- increasing involvement of Corresponding Members with Atlantic PIRI.

# Overview

Atlantic PIRI is a professional, multi-stakeholder, cross-jurisdictional discussion forum that is greater than the sum of its parts. It is an ongoing exercise in harmonization that engages Provincial environment departments, regional consultants, Federal agencies and the “downstream” petroleum industry in Canada. With a significant number of new member

representatives in 2010, the group used the *Atlantic PIRI Terms of Reference* (2009) as a foundation for decision-making as it developed new ways of doing things that reflect the perspectives of new members, and that respond to new issues coming to the table. The significant work of becoming familiar with version 3 of the Atlantic RBCA software helped build cohesion and a depth of understanding amongst members of the group. 2010 also saw further development of outreach and ongoing relationship-building with non-technical stakeholders.

## Accomplishments in Implementation in 2010

- Files for over 350 contaminated sites were closed in 2010 after remediation using Atlantic RBCA
- Since 1999 more than 5,350 sites have been remediated using Atlantic RBCA.

# Technical Improvements

The Atlantic RBCA tool kit is the heart and anchor of Atlantic PIRI’s work. Atlantic PIRI is committed to the Atlantic RBCA tool meeting or exceeding the level of protection afforded by the 2008 *Canada-Wide Standards for Petroleum Hydrocarbons in Soils*. The newly developed version 3 of the Atlantic RBCA software tool was closely scrutinized in 2010 to ensure it reflects new guidance from the Health Canada and the Canadian Council of Ministers of the Environment, as well as responding to the realities of Atlantic Canada, such as: use of a well-bore dilution factor, which accounts for dilution when contaminated soil leaches to potable groundwater; and the addition of two more land uses - agricultural and industrial – to the previous commercial and residential designations.

## Accomplishments in Technical Improvements in 2010

- Release of *Atlantic RBCA Guidelines for Laboratories version 3*.
- Update of the Atlantic RBCA software toolkit, *User Guidance* and online training to version 3.
- Completed EcoRBCA toxicity testing for petroleum in sediments.

The *Atlantic RBCA User Guidance Documentation* explains the scientific basis of Atlantic RBCA. Both it and the online training program were updated. The new *User Guidance* includes harmonized approaches to the definition and assessment of free product in soil and groundwater and to the assessment of non-petroleum contaminants – both areas that previously were left to the discretion of provincial regulators.

The new version of the *User Guidance* highlights the improvements of the new version of the toolkit and is re-organized to make it easier to use. It includes revised Tier 1 risk-based, and Tier 2 pathway-specific, screening levels and a new *Site Closure Submission Form*. The substantial *User Guidance for Soil Vapour and Indoor Air Petroleum Hydrocarbons* is now a provided to users as a stand-alone document, instead of as an appendix.

In the area of EcoRBCA, the *Terms of Reference* for petroleum in sediments toxicity testing were developed, and testing completed through contracts to two accredited environmental laboratories, with funding from Environment Canada and Atlantic PIRI. The test results will be interpreted and validated with respect to EcoRBCA sediment criteria in 2011.

## Harmonization

Harmonization depends on a good understanding of the areas where the four Provincial jurisdictions in Atlantic Canada employ similar approaches, and where they do not. To that end, Atlantic PIRI examined the existing regulatory harmonization achievements and identified opportunities for further harmonization. The Harmonization Working Group identified four broad areas where there may be opportunities for brownfield policy harmonization:

1. Regulatory and Policy Regimes
2. Technical Guidance and Methods
3. Financial Incentives for Redevelopment of Brownfields
4. Responsibilities of Individuals and Site Owners

The work done in 2010 will form the basis for discussion within Atlantic PIRI for further regional harmonization.

Continuing its work from 2009, the harmonized *Template for Closure Reports* was used by some consultants in 2010, and succeeded in providing a consistent reporting framework in all four Provinces and streamlining regulatory review. Feedback from users of the initial version resulted in revisions and a version 2 is planned for release in 2011. Also, Atlantic PIRI developed a new *Site Closure Submission Form* that will provide a “roadmap” of required minimum information required for site closure reports.

Both Nova Scotia and New Brunswick continued development of Provincial contaminated site regulations in 2010. Atlantic PIRI supported their initiatives, both formally - by participating as a stakeholder - and as a forum for discussion of technical issues that could arise on implementation of new contaminated site regulations.

### Accomplishments in Harmonization in 2010

- Developed a harmonized *Site Closure Submission Form*.
- Developed version 2 of the harmonized *Template for Closure Reports* in response to user feedback.
- Identified opportunities for regulatory and brownfield policy harmonization in Atlantic Canada.
- Tracked regulatory trends in contaminated site and brownfield policy development in jurisdictions across Canada.

# Stakeholder Outreach

A focus on outreach to stakeholders was continued in 2010. Atlantic PIRI embraced the opportunity to build a better relationship with a wide range of stakeholders, whose input can help further improve the Atlantic RBCA tools. Part of Atlantic PIRI’s response is in the form of the newly-developed *Terms of Reference for Corresponding Members*”, which define how Atlantic PIRI offers an opportunity for greater involvement in its work to individuals in technical and non-technical sectors (such as insurance, academia, and manufacturing). Corresponding members contribute expert insight and recommendations by reviewing key documents during the drafting process.

## Accomplishments in Stakeholder Outreach in 2010

- Publication of the Atlantic PIRI *Terms of Reference*.
- Development and publication of *Corresponding Member Terms of Reference*.
- Ongoing support to and technical discussions with provinces developing regulations.
- Presentations to the Canadian Land Reclamation Association Atlantic conference and to the Canadian Brownfields Network National Conference.
- Developed a marketing strategy to promote on-line training with Atlantic RBCA.
- Continued participation in CCME Soil Quality Task Group.

Technical stakeholders benefit from the online training program accessible at [www.rbcatraining.com](http://www.rbcatraining.com), which has provided 45 people with education in the fundamentals of Atlantic RBCA since its launch in October 2008. A marketing strategy for the online program was developed in 2010 to support the release of Atlantic RBCA version 3.

Atlantic PIRI had a public presence in 2010, most notably with members making presentations at the Canadian Land Reclamation Association, Atlantic Chapter conference in Halifax and at the Canadian Brownfields Network annual *Brownfields Conference* in Toronto.

All stakeholders can access an archive of key documents from Atlantic PIRI, as well as implementation information from the four Provincial governments, on the website at [www.atlanticrbca.com](http://www.atlanticrbca.com).

# Atlantic PIRI Objectives for 2011

## Technical Improvements

- Release of version 3 of the Atlantic RBCA software and *Atlantic RBCA User Guidance Documentation version 3*.
- Public comment period on Atlantic RBCA version 3, prior to phased implementation.
- Online training for implementation of Atlantic RBCA version 3.
- Release of the improved *Ecological Receptor Screening Guidance (EcoRBCA)*.
- Review of a four-phase model option for Atlantic RBCA toolkit.
- Development of user guidance for assessment of volatile organic compounds.

## Harmonization

- Release of the harmonized *Template for Closure Reports version 2*.
- Ongoing support for provincial initiatives to develop contaminated site regulations.
- Development of strategies for priority areas in regulatory harmonization.

## Stakeholder Outreach

- Implement Corresponding Members involvement.
- Development of a stakeholder outreach work-plan and information kits tailored to different audiences.
- Develop and coordinate information sessions about Atlantic RBCA version 3 for technical and non-technical stakeholders.
- Continue regulatory liaison with the CCME Soil Quality Working Group.

## Atlantic PIRI Members in 2010

Susan Barfoot, Newfoundland and Labrador	Michelle Paul-Elias, Cobalt Properties
Normand Benoit, Petro-Canada	Michelle Phillips, Health Canada
Gordon Check, Nova Scotia	Michel Poirier, New Brunswick
John Czechowski, Shell Canada	Roger Poirier, Conestoga Rovers & Associates
Dan Hemsworth, Nova Scotia	Jean-Sébastien Pomares, Ultramar
Bryan Leece, Dillon Consulting	Bill Simpkins, Canadian Petroleum Products Institute
Glenda MacKinnon-Peters, Prince Edward Island	George Vincent, Imperial Oil
Rita Mroz, Environment Canada	Louise White, Health Canada
Tania Noble Sharpe, Stantec Consulting	