

Atlantic PIRI in 2009 :
Next Generation



Annual Report of Atlantic PIRI

March 2010

Executive Summary

A renewed mandate in 2008 set the tone for the Atlantic Partnership in Risk Based Corrective Action Implementation (Atlantic PIRI) in 2009. Over the year, the group made significant progress in developing the next generation of technical tools and stakeholder relationships, and as the year progressed, in welcoming the next generation of Atlantic PIRI members.

The year started with a confirmation of Atlantic PIRI's primary focus - development and support of technical tools for risk-based contaminated site management. The highlight of the 2009 work plan was building version 3.0 of the Atlantic RBCA software tool, harmonized with the 2008 Canada-wide Standards for Petroleum Hydrocarbons in Soil (PHC-CWS). Version 3.0 includes a new version of the *User Guidance Documentation*, which describes the scientific basis of Atlantic RBCA and provides guidance on using the software tool. Other "next generation" tools new to the Atlantic RBCA toolkit in 2009 were the draft version of the *EcoRBCA Screening Tool*, with new screening criteria for soil, sediment, surface water and groundwater; and the harmonized *Template for Closure Reports*, which proved useful in reducing the time required for regulatory review and site closures during a preliminary implementation in 2009.

With a decade of experience as a regional forum on contaminated site management, Atlantic PIRI is acknowledged for the depth of its collective expertise. In 2009, Atlantic PIRI drew from that pool in making a submission to the Nova Scotia Law Reform Commission in support of that Province's developing contaminated site regulations. The group also noted New Brunswick's progress towards regulation through amendments to the *Clean Environment Act*.

Every year, more sites are cleaned up and moved on to new uses through application of Atlantic RBCA. The number of remediated sites passed the 5,000 mark in 2009. More sites means more people come into contact with Atlantic RBCA; and questions and concerns can arise amongst those who are new to the approach. Reaching beyond its technical stakeholders, this year Atlantic PIRI entered into dialogue with the Insurance Bureau of Canada to clarify with their members how Atlantic RBCA works. Atlantic PIRI recognizes the value of feedback and the potential for contribution to the continuous improvement of Atlantic RBCA tool that comes from a variety of sectors, and is planning how to engage a next generation of stakeholders.

The year also saw development of an *Atlantic PIRI Terms of Reference*, which captured how the group works. This document proved a valuable tool as several members moved on, creating the opportunity for a next generation of representatives to join Atlantic PIRI. Technical outreach continued, with good participation in the first full year of on-line Atlantic RBCA training.

In 2010 Atlantic PIRI is planning:

- the release v 3.0 of the Atlantic RBCA software tool and *User Guidance*;
- an update of the online training program;
- development of user guidance for volatile organic compounds;
- testing of the EcoRBCA sediment protocols;
- the release a final version of the *Template for Closure Reports*;
- continued support of the regulatory development in NS and NB; and
- development of a *Terms of Reference* to engage key stakeholders.

Next Generation

Summary of Accomplishments in 2009

Implementation

- Files for over 375 contaminated sites were closed in 2009 after remediation using Atlantic RBCA, bringing the total since 1999 to more than 5,000 sites.
- A large majority of federal site remediation projects in Atlantic Canada continue to employ the Atlantic RBCA process.

Succession

- Strategic planning to develop a 5-year vision and work plan.
- Developed *Terms of Reference for Atlantic PIRI* processes and membership.
- A next generation of members joined Atlantic PIRI, including a Health Canada liaison with federal agencies that address human health and toxicology.

Continuous Improvement

- Development of version 3.0 of the Atlantic RBCA software tool and identification of areas in the *User Guidance* that need to be updated.
- Enhancement of the *Ecological Screening Checklist*, produced by the EcoRBCA Task Group.
- Development of an EcoRBCA sediment testing protocol, with funding for testing.

Harmonization

- Submission to the Nova Scotia Law Reform Commission on the development of contaminated site regulations.
- Noted amendments to the *Clean Environment Act* in New Brunswick.
- Release of a preliminary regional harmonized *Template for Closure Reports*.

Stakeholder Outreach

- Clarification of stakeholder questions with the Insurance Bureau of Canada.
- Decision to consider how to encourage more participation and feedback from key stakeholders.
- Organized Soil Vapour Intrusion workshops in three provinces.
- Presentations to Canadian Land Reclamation Association Atlantic conference.
- Good participation in the first 14 months of on-line training with Atlantic RBCA.
- Continued regulatory liaison with the CCME Soil Quality Working Group.
- Continued participation in the Intergovernmental Forum on Brownfields and the Canadian Brownfield Association.

Succession

Atlantic PIRI started 2009 with a strategic planning session to discuss its priorities as related to the renewed mandate it received in 2008. The session produced a 5-year vision and work plan that has a greater emphasis on building and supporting the Atlantic RBCA technical tools. The session also revealed a need to document the mechanisms that had developed over the previous decade, which enable Atlantic PIRI to do its work. The new *Terms of Reference* for the group was accepted by all members.

Over its ten years of operations, Atlantic PIRI has benefited from the valuable contributions of many members who have moved on to other challenges. Several people left the group in 2009, because of changes in mandate, new responsibilities, or retirement. Atlantic PIRI gratefully said goodbye, and welcomed the next generation of representatives. The *Terms of Reference* provided a valuable framework throughout the transition and gave new members a clearer understanding of what Atlantic PIRI does and how it works. The group now includes a liaison representative from Health Canada who connects Atlantic PIRI with Federal departments and agencies that hold a wealth of expertise in human health and toxicology.

Continuous Improvement

The Atlantic RBCA technical tool kit is the heart and anchor of Atlantic PIRI's work. Throughout 2009, a new version of the software tool was developed to harmonize with the 2008 Canadian Council Ministers of the Environment Canada-Wide Standards for Petroleum Hydrocarbons in Soil. The Atlantic PIRI Technical Working Group worked with the builders of the original Atlantic RBCA software, to incorporate changes to three exposure pathways (soil leaching to groundwater; soil vapour intrusion into indoor air; and soil ingestion) and add agricultural and industrial land uses to the existing residential and commercial uses. The resulting Atlantic RBCA Version 3.0 is further updated to be compatible with Excel 2007.

The *User Guidance Documentation* is a key part of the toolkit – it explains the scientific basis of Atlantic RBCA. The Technical Working Group identified areas of the *User Guidance* that will require updating to support v3.0 of the software tool, and EcoRBCA. Version 3.0 of the *User Guidance* will be released with the software in 2010.

The Tier I *Ecological Screening Protocol for Petroleum Impacted Sites in Atlantic Canada* was released for internal review in 2009. This protocol will replace the current ecological checklist, providing a more comprehensive screening method for assessing potential risk to ecological receptors. The new EcoRBCA protocol includes screening criteria for petroleum hydrocarbons in soil, sediments, surface water, and groundwater. The EcoRBCA Task Group members also continued to develop a toxicity testing protocol to validate the sediment criteria. Atlantic PIRI, Environment Canada, and Canadian Petroleum Products Institute each agreed to fund a validation program for these criteria in 2010.

Next Generation

Harmonization

The Atlantic PIRI forum is an essential process for regional harmonization around contaminated site issues and as a result it has become a repository of expertise that, when requested, is able to contribute to discussion of issues in the member jurisdictions. In 2009, both Nova Scotia and New Brunswick were engaged in development of contaminated site regulations. Nova Scotia Environment continued its work to develop regulations for a deadline at the end of 2010. In support of this work, Atlantic PIRI made a submission to the Nova Scotia Law Reform Commission and participated in the Deputy Minister's Advisory Committee and Standards Committee. In New Brunswick, Atlantic PIRI welcomed amendments to the Clean Environment Act, in the spring of 2009, that clear the way for development of contaminated site regulations as proposed in the *Comprehensive Plan for Brownfield Redevelopment in New Brunswick* (2008).

Harmonization of Provincial management approaches is a hallmark of Atlantic PIRI. During 2009, a preliminary harmonized *Template for Closure Reports* was successfully employed by site professionals in NB and PEI. The *Template* sets a consistent reporting framework and identifies areas where Provincial approaches to Atlantic RBCA differ, making it easier for consultants reports to meet regulators' expectations. The *Template* proved useful in streamlining regulatory review, contributing to faster regulatory site closures. Feedback from users is being incorporated into a final version, for regional implementation in 2010.

The Atlantic PIRI regulators also worked together to harmonise areas of regulatory discretion in application of Atlantic RBCA. This new content will be included in v3.0 of the *User Guidance*.

Stakeholder Outreach

Atlantic RBCA is used to manage more contaminated sites every year. With this increased exposure, questions naturally arise about the risk-based approach. Atlantic PIRI engaged in dialogue with representatives of the Insurance Bureau of Canada to address concerns and build understanding of Atlantic RBCA and the role of Atlantic PIRI. Further to this interaction, Atlantic PIRI has recognized the value of establishing a way to engage a wider scope of stakeholders. The Stakeholder Working Group started work on a *Terms of Reference* to describe how Atlantic PIRI could engage "corresponding members" from sectors such as insurance, academia, and manufacturing, who may be affected by Atlantic RBCA. This next generation of stakeholders would provide feedback and contribute to further improvement of Atlantic RBCA tools.

Increasing the levels of technical knowledge about Atlantic RBCA remains an important activity as the tools are continually improved. Atlantic PIRI members organized Soil Vapour Workshops in Moncton, Halifax, and St. John's in June 2009, where over 40 participants were provided with details of site assessments for vapour intrusion, and mitigation and abatement techniques.

Next Generation

The online training program accessible at www.rbcatraining.com provided 39 people in 2009 with education in the fundamentals of Atlantic RBCA. The self-paced course ensures a minimum level of understanding of the key concepts and is both more accessible and less costly than on-site training. Atlantic PIRI members also made presentations at the Canadian Land Reclamation Association Atlantic Chapter conference in Halifax in 2009.

To support all users of Atlantic RBCA and members of the public, Atlantic PIRI continues to maintain a website with an online library of Atlantic RBCA and related Provincial documentation at www.atlanticrbc.com.

Atlantic PIRI Objectives for 2010

Continuous Improvement

- Release of version 3.0 of the Atlantic RBCA software.
- Updating and release of the User Guidance Documentation for Version 3.0, including discussion of the scientific basis of the EcoRBCA screening tool and identifying areas of regulatory discretion.
- Testing of the EcoRBCA sediment screening protocol.
- Develop user guidance for volatile organic compounds.
- Regional implementation of the harmonized *Atlantic RBCA Site Closure Report Template*.
- Update of the E-learning content to reflect changes in Atlantic RBCA version 3.0.

Harmonization

- Ongoing contribution and support for Nova Scotia Environment and New Brunswick Environment activities to develop contaminated site regulations.

Stakeholder Outreach

- Develop Terms of Reference for “corresponding members” to establish a more formal relationship, as a means to elicit feedback from people in organizations and professions who may be affected by or make a contribution to Atlantic RBCA.
- Develop a marketing program for the online training program to coincide with release of Atlantic RBCA v3.0.
- Organise information sessions about changes included in Atlantic RBCA v3.0.
- Continue regulatory liaison with the CCME Soil Quality Working Group.
- Continue participation in Intergovernmental Forum on Brownfields, the Canadian Brownfield Association and liaison with the Council of Atlantic Environment Ministers.