

How Clean is Clean?

Visit the Atlantic PIRI Web Site at
www.atlanticrbca.com

Background

There are many substances that can contaminate land, but the majority of contaminated sites in Atlantic Canada are impacted with common petroleum products such as gasoline and furnace oil.

Decades of using these products have helped fuel economic activity, but their use has also left a legacy of persistent petroleum contamination. Fuel from leaking storage tanks and spills can move through soil and may release harmful vapours. Over time, spilled petroleum products can degrade water supplies by seeping into streams and dispersing into groundwater reservoirs.

Thousands of Atlantic Canadians are affected by environmental problems posed by petroleum impacts at their homes, farms and businesses. Effective management of these problems is a major concern for property owners, communities, banks, legal firms, real estate agencies, insurance and oil companies and government agencies.

Introducing

This newsletter introduces a new tool for the clean up of contaminated properties in Atlantic Canada. The **Atlantic Risk Based Corrective Action** process (Atlantic RBCA) provides consistent, effective and achievable standards to protect people and the environment, based on assessment and management of risks.

Atlantic RBCA

Petroleum impacted sites are a priority for environmental clean up everywhere in North America. But, until recently, clean up goals were based on varying standards for how clean a property needed to be, in order to protect the environment and people from risk. However, the standards were not necessarily based on scientific measures of possible harm. As a result, the effort and resources used to achieve a high level of clean up often produced only slightly improved environmental conditions.

About 10 years ago, environmental professionals in the United States began collaborating to establish a scientific basis for the standards of petroleum clean up action. The process they developed, risk based corrective action (RBCA), provides an alternative to criteria based clean up action. It is a road map that allows users to identify clean up goals for a specific site based on the potential risk to people and the environment. The RBCA process is defined by standards produced by the ASTM, the American equivalent to the Canadian Standards Association. Developed for petroleum, the RBCA process is also a useful tool for managing impacts of other contaminants.

The central idea of RBCA is that land does not always have to be made pristine to be usable; the acceptable level of clean up depends on the risk to people and the environment.



▶ Getting going

The Canadian Council of Ministers of the Environment endorses the philosophy of risk management for contaminated sites in Canada. In 1997, a partnership was launched to customize RBCA for use in Atlantic Canada. "Partners in RBCA Implementation" (PIRI) includes representatives from the petroleum industry, environmental consultant companies and government departments.

The Atlantic PIRI group adopted the principles of RBCA developed in the US and then adapted them to the environmental conditions and requirements of Atlantic Canada. Each province using Atlantic RBCA will maintain their own regulations governing environmental protection, while they promote the RBCA approach to the challenge of restoration of contaminated sites.

Now, Atlantic PIRI members are reaching out to explain Atlantic RBCA to the rest of their community. It is time to introduce this process to the people who work closely with the families, businesses and governments who have to assume the responsibility for contaminated lands.

Partners in PIRI

Petroleum Industry

Canadian Petroleum Products Institute
(Shell Canada Products Limited,
PetroCanada, Imperial Oil Limited,
Ultramar Ltd. and other member companies)
Irving Oil Ltd.

Environmental Consultants

MGI Limited
Jacques Whitford Environment Limited
Dillon Consulting (Porter Dillon) Limited

Atlantic Provinces

New Brunswick Department of the Environment
Prince Edward Island Department of Technology and Environment
Nova Scotia Department of the Environment
Newfoundland and Labrador Department of Environment and Labour

Using Atlantic RBCA

Often an insurance adjuster, real estate agent, or environmental officer is the first to identify a problem of petroleum contamination. Perhaps a pre-existing problem is uncovered during review of a mortgage application. The first step is to contact the provincial department responsible for protection of the environment.

The province's management process will then come into play. Environmental professionals will identify the type of contamination. Working with the Atlantic RBCA process, these professionals will determine the seriousness of the problem, assess the risk and establish a plan for clean up. Provincial government staff will review the remediation plans submitted to them, to ensure they are appropriate and meet regulations.

Atlantic RBCA is a process that gives confidence all around – that meaningful standards are applied; that the clean up is carried out properly; that the environment is protected and that contamination problems are handled through responsible action by industry, businesses, individuals and the government.



How clean is clean?

Clean enough to pose no risk to people or the environment.

For more information on Atlantic RBCA:

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