ATLANTIC PIRI
PARTNERS IN RBCA IMPLEMENTATION
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News

I. Canada-wide standards

The Canadian Council of Ministers of the Environment (CCME) has committed to developing standards, applicable across the country, for a variety of environmental chemicals. The standard for petroleum hydrocarbon (PHC) in soil was accepted in principle by the CCME at their June 2000 meeting.

The petroleum hydrocarbon Canada-wide standard (CWS) provides remedial standards for contaminated soil and subsoil in four land-use categories - agricultural, residential/parkland, commercial, and industrial. The standards are applied through three Tiers: Tier 1 – generic numerical levels; Tier 2 – adjustments to Tier 1 levels based on site-specific information; Tier 3 – site-specific risk assessment. The same high level of environmental and human health protection is required at all three tiers.

The PHC CWS specifies consistent methods and outcomes for assessment and management of petroleum-impacted soils. The PHC CWS is unique because it does not include a timeframe, but rather requires jurisdictions to commit to their own timelines for implementation. Provinces and territories will have considerable flexibility in the detailed design of implementation plans. The jurisdictions have agreed to review current programs and tools and, as required, to develop and activate jurisdictional implementation plans to integrate the CWS or to ensure equal or better protection.

Details of the PHC CWS are available on the CCME web site What's New section, www.ccme.ca/2e_new/2e.html

II. Atlantic RBCA and the PHC CWS

Through the Atlantic RBCA program, the four Atlantic Provinces are well underway in implementing processes for risk-based remediation of sites impacted by petroleum products. The Tier 1 lookup table has been in use since 1999 in three of the provinces, along with the Atlantic RBCA software tool.

On behalf of the four Atlantic Regulators, a Technical sub-committee of the Atlantic PIRI Committee is reviewing both the Atlantic RBCA process and the PHC CWS. They will produce a regional implementation plan that will be delivered to each of the four Provincial governments for independent consideration.

In developing the PHC CWS, the CCME evaluated the Atlantic RBCA process. The resulting criteria are similar, but the Atlantic PIRI Committee has already identified key areas of difference:

- The CWS includes numerical evaluation of ecological risks. Atlantic RBCA identifies ecologically sensitive sites, but does not evaluate risk.
- The CWS includes Tier I values for four land-uses while Atlantic RBCA covers two.
- The CWS does not provide criteria for BTEX and PAH in soils.
- The CWS methodology does not include Tier I values for groundwater.
- The CWS and Atlantic RBCA utilize different break points in the carbon fractions. The CWS identifies four fractions from C6 to C34+. Atlantic RBCA divides the TPH mixture into three products covering the range C6-C32.
- The vapour intrusion model used in Atlantic RBCA does not consider advection.

III. Time Frame

The PHC CWS will be considered for adoption by each jurisdiction at the spring CCME meeting. If the Standards are adopted, each province will commit to its' own timeline for implementation at that point.

IV. Impact on users of Atlantic RBCA

Atlantic PIRI anticipates the technical review may result in some revisions to the Atlantic RBCA methodology and the Atlantic RBCA software.

Completed remediation projects will not be affected by any changes in the standards. If any changes occur, each province will have an implementation period.

V. Contact Atlantic PIRI

For more information about Atlantic RBCA, to subscribe to our e-mail notification service for further updates and for the coordinates of Atlantic PIRI members, visit the Atlantic RBCA web site: www.atlanticrbca.com