Management of Contaminated Sites in Nova Scotia

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Presentation-RemTech 2014
Background

- Movement from previous policy/guidance approach for contaminated sites to regulations as of July 2013
- Aimed to address liability concerns, encourage brownfield redevelopment and to provide consistent approach for all work at contaminated sites
- Work began in 2006 with regulations passed in 2012
- NS continues to utilize risk based site management approach in conjunction with Atlantic PIRI
Regulations affect ALL contaminated sites
  • Brownfields
  • Commercial/Industrial
  • Residential
  • Public & Private sites

Process Includes
  • Mandatory Notification
  • Assessment
  • Remedial Action
  • Confirmation & Closure
The Regulations outline

• Specific responsibilities for persons involved
• Site Professional qualifications and expectations
• Timeframes for assessment and remediation
• Comprehensive tables of compiled numerical Tier 1 Tier 2 pathway specific environmental criteria for Nova Scotia

• Allowable remediation level approaches include:
  • Generic Tier 1 Environmental Quality Standards (EQS)
  • Tier 2 Pathway Specific Standards (PSS)
  • Risk-modelled Site Specific Risk Assessment (SSRA)
  • Exposure management measures
The Regulations require

- Suspected contamination to be evaluated for notification requirements and possible exemptions

- The regulations to be followed once Notification is made

- One of two remediation streams to be followed:
  - Limited Remediation
  - Full Property Remediation

- Adherence to 7 “Ministerial Protocols”
  - Provide the technical rules related to contaminated sites management processes
Remediation Pathways

LIMITED REMEDIATION PATHWAY

Notification of Contamination
Environmental Site Assessment - Limited Remediation ESA

Environmental Site Assessment - Phase 1 ESA and Phase 2 ESA
Remediation Levels
Remedial Action Plan
Confirmation of Remediation
Record of Site Condition

FULL PROPERTY REMEDIATION PATHWAY

Remediation Levels
Remedial Action Plan
Confirmation of Remediation
Declaration of Property Condition
Approach to site assessment/remediation

- Professional accountability (including work with professional associations on development of practice standards and guidance)

- Specific requirements for conducting work and filing information, including risk assessments

- Audits to ensure compliance

- Streamlined regulatory review process
Approach to remedial actions/technology application

- establishing remedial objectives and approaches
- implementing site actions to achieve the objectives
- monitoring and reporting
- ensuring no adverse effects to the environment
- Overall performance based outcome approach
Approach to Risk Based Corrective Action (RBCA)

- Long-standing NS approach that continues within regulations
- Key issues are *Unconditional* and *Conditional* remediation
- Conditional results in risk management
- Unconditional results in achieving generic or site specific standards (Tier 1 or Tier 2)
- Rely heavily on our partnership with *Atlantic PIRI*
Risk Based Corrective Action (RBCA)
-Third party considerations

• NS approach includes “Conditional and Unconditional Remediation”

• Both are acceptable for application to third party sites

• *Conditional remediation* approaches at third party sites require *third party agreement* prior to regulatory filing
Atlantic PI RI and Atlantic RBCA

- Partnership in RBCA Implementation - since 1997
- Created and maintains Atlantic RBCA
- All four Atlantic provinces, consultants and industry
- Produce technical tools, standards (petroleum), guidance and training, including online Atlantic RBCA training
Ongoing Atlantic PI RI technical projects

• Updated Indoor air and Soil Vapour assessment guidance (this fall)

• Application of Atlantic RBCA toolkit for chlorinated solvents in soil and groundwater (this fall)
Ongoing work with Nova Scotia’s regulations

**Background soil concentrations:**

- Gathering data from existing datasets
- Looking at Ontario, BC’s and Quebec’s approaches at publishing upper range background levels
- Looking at urban versus rural data
- Incorporate natural and anthropogenic issues
- Hope to produce materials in 2015
Ongoing work with Nova Scotia’s regulations

• Continued work with professional associations on practice standards

• Commitment to continuous evaluation, improvements and adjustments
Thank you for attending the presentation

- Comments or inquiries regarding the *Contaminated Sites Regulations* and Ministerial Protocols should be directed to:

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