

**Canadian Land Reclamation Association (CLRA)
Atlantic Reclamation Conference (ARC) 2014
KC Irving Environmental Science Centre
Acadia University
Wolfville NS**

8:45 – 9:15 (incl. Q&A) - October 30, 2014

**Legal, Business, and
Technical Implications of
the NS Contaminated Sites
Regulations (Case Study)**

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Presentation Outline

1) Case Study Introduction

2) Legal, Business, and Technical Implications

3) Closing Comments and Lessons Learned

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General Introduction Nova Scotia Case Study

- 1) Bedford, NS – non-potable, coarse soil, with fill, beside a watercourse
- 2) Mixed Zoning - residential, with current commercial activities, in residential area
- 3) 1940's concrete basement (and service bay) with 1980's superstructure above
- 4) Gas Station (1940's – 1970's);
Automobile Transmission and Sales (1970's - date)
- 5) Impacted adjacent residential lot





Potential Compounds of Concern Nova Scotia Case Study

- 1) Gasoline type TPH from when it was a gas station (1940's – 1970's)
- 2) #2 Furnace Oil type TPH mix from former above ground storage tanks beside building
- 3) Weathered #6 Fuel Oil
- 4) Potential for PAH's and VOC's investigated but not encountered
- 5) #2 Furnace Oil type TPH is offsite

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Potential Receptors of Concern Nova Scotia Case Study

- 1) People working on site (with consideration to future residential use)
- 2) People living on residential properties in the area (including adjacent properties)
- 3) Impacted adjacent undeveloped residential property (furnace oil)
- 4) Ecological receptors associated with adjacent brook (no unacceptable risks)



Ownership and

Responsibilities

Nova Scotia Case Study



- 1) Mr. “Oldman” owned and operated the property before selling it in 2003, and had Phase II info highlighting problems
- 2) Mr. “Newman” bought the property in 2003 from Mr. “Oldman”
- 3) Unusual #1: Mr. “Oldman” in 2003 takes env. clean up responsibility for both sites, to satisfaction of Mr. “Newman”
- 4) Unusual #2: Mr. “Oldman” - not a bank - holds the mortgage of Mr. “Newman”

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From Guidelines to Regulations Before July 2013 Legal Implication

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Mr. “Oldman”

- was responsible party under guidelines
- is responsible to rehabilitate site, as a secured creditor who controlled the site, under NS Environment Act 165 (3) (a)
- some assessment & offsite remediation
- NS Environment received 2000 assessment and 2002 RAP documents (that included assessment info but also proposed more assessment activities)
- more assessment info sent in after 2003





From Guidelines to Regulations Before July 2013 Legal Implication

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For case study discussion, assume site activities after 2003 did not contribute to onsite or offsite environmental impacts.

Mr. “Newman”

- was the property owner after 2003, but not a responsible party under guidelines
- paid for a new Phase I report in 2011
- was unsuccessful in trying to compel Mr. “Oldman” to clean up the site





From Guidelines to Regulations After July 2013 Legal Implication

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Mr. “Newman”

- as property owner is environmentally responsible for site under new Reg's
- is aware of contamination on his property and must report it to NS Env.
- response by NS Env to Form 100 is to order a site clean up within a 2 year period
- Remedial Action Plan OK with NS Env.
- expects “Oldman” to cover the costs



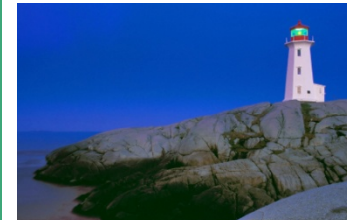


From Guidelines to Regulations Change After July 2013 Legal Implication

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For Mr. “Oldman”

- did he have sufficient information to appreciate the magnitude of commitment made to Mr. “Newman” in 2003 of taking the environmental responsibility for site?
- was secured creditor role appreciated?
- does responsibility change if regulatory “goalposts” change from 2003 to 2013?
- he was a knowledgeable commercial property owner, with responsibilities for the on and off site environmental impacts





Assessment and Remediation Business Implication

- For Mr. “Oldman” why take actions when:
- no regulatory push to take action on site
 - no regulatory push to take action off site
 - no NS Env. accepted RAP for site(s)
 - no seeming prospect of a Ministerial Order
 - perhaps he seeks an approach of managing the property as a commercial site, and assess accordingly

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Assessment and Remediation Business Implication

For Mr. “Oldman” and Mr. “Newman”

- neither had sufficient assessment info in 2003 to calculate quantities and dollars to achieve Tier I, residential remediation (why there is environmental responsibility clause in their 2003 contract agreement)
- neither had similarly sufficient assessment information by July 2014
- the business risks they were taking were not well quantified

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Assessment and Remediation Business Implication

For Mr. “Newman”

- where are the financial resources to respond NS Environment and 2 year?
- Is it just that Mr. “Newman” must first pay for Mr. “Oldman’s” responsibilities?
- will balance of mortgage owed be sufficient to cover environmental costs?

A 2 year to remediation completion date increases likelihood of an excavation and off site disposal approach

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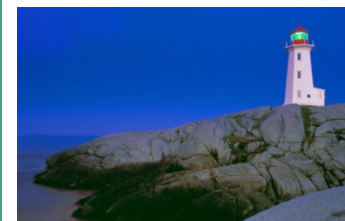


Assessment and Remediation From Guidelines to Regulation Business Implication

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For Mr. “Newman”

- He paid for a “clean” site (with Mr. “Oldman” taking env. responsibility). Must he agree to a site management route?
- Is building demolition cost effective vs. remediation with building in place?
- Does the civil responsibility of Mr. “Oldman” exceed NS Env. requirements?





From Guidelines to Regulation Business Implication

Mandate in 2014 Assessment Work is to prepare remediation quantity and dollar estimate to execute the NS Environment accepted 2014 Remediation Plan:

- that achieves Tier I Residential goals
- that completes remediation in 2 years
- without interrupting commercial activity
- for both onsite and offsite impacts

Remediation Scenario \$\$\$ > expectations

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From Guidelines to Regulation Technical Implication

A 2 year to remediation completion date increases likelihood of excavation and off site disposal

Reporting Requirements (on and off site):

- Form 100 Notifications of Contamination
- Checklists 300: Phase I Info Summary
- Checklists 400: Phase II Info Summary
- Checklists 600: Remedial Action Plan

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From Guidelines to Regulation Technical Implication

More assessment work was needed in 2014 to estimate quantities and dollars for executing a comprehensive 2014 remediation plan.

Assessment Requirements:

- Delineate off site impacts
- Delineate impacts under building
- Delineate impacts beside building
- Historical information (e.g. Ownership)

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From Guidelines to Regulation Technical Implication

The most comprehensive assessment activities in over 10 years happened in 2014 because:

- regulatory push after on and offsite Form 100 Notifications submitted
- sufficient dollars perceived to be available from mortgage money
- property owner motivated to clean up the site by 2016 (if costs are covered by Mr. “Oldman” through the balance of the outstanding mortgage money owed).

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Closing Comments and Lessons Learned

- 1) New process for “full remediation” in 2 years resulted in a planned excavation over long term management. Still, after the 2003 sale of the site, no remediation happened. Why?
- 2) Consider a text review of NS Contaminated Sites Regulations documents (in 2015?).
- 3) Civil Law agreements between Mr. “Oldman” and Mr. “Newman” on responsibility, and mortgage, are significant and unusual.



Thank You ARC 2014

Thank you for this opportunity.

For further discussions, please contact:

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