Contaminated Sites (Re)Development: Legal Requirements that Industry and Consultants Need to Know

Jacquelyn Stevens

Partner

This presentation provides general information and is not intended to provide legal advice.

Audience members should seek legal advice for specific situations.

RemTech 2025 Banff, Alberta October 16, 2025



Overview

- Brownfields Basics
- Environmental Due Diligence
- Redevelopment Plans
- Regulatory Regimes Ontario, Manitoba, Saskatchewan, Alberta,
 British Columbia
 - Trigger for Reporting
 - Applicable Standards
 - Technical Assessments
 - Remedial Approaches
 - Protections from Future Regulatory Action



What are Brownfields?

A brownfield property is

- vacant, derelict or underutilized
- previously used for commercial or industrial purpose; past activities may have left contamination
 - service stations
 - dry-cleaning establishments
 - manufacturing operations
 - waste disposal facilities
 - oil and gas processing and storage facilities
- may pose health, environment or safety risk
- costly to manage



Brownfields Basics

Brownfield contamination can include

- groundwater and surface water contamination contaminants enter the surface water and groundwater systems
- soil contamination contaminants enter and remain in the soil
- soil vapour contaminants in the soil enter overlying buildings as vapour, causing air quality problems
- A potential brownfield property is assessed based on the location, intended future land use, type and level of contamination, potential remediation requirements, and project planning and construction
- Findings of due diligence assessments can impact project viability, plans, timelines and costs



Environmental Due Diligence

- Key to understand risk and challenges that may arise and delay or prevent the development project from going forward
- Environmental due diligence to understand and, where possible, mitigate the environmental, regulatory and financial risks and liabilities early in the process
 - assess federal, provincial/territorial and municipal requirements
 - consider Indigenous rights and consultation requirements
 - confirm actual or potential contamination, species at risk, items of archaeological significant
 - consider approvals/permits/environmental concerns (air, water, waste, noise, dust, vibrations, excess soil) for redevelopment and construction activities

The Redevelopment Plan

- Often brownfield developments take longer than greenfield development because of the additional environmental issues and regulatory requirements
 - **Studies** performing ESAs to determine the extent of contamination, set out objectives, develop a remediation plan
 - **Rehabilitation/Remediation** where contamination is confirmed, the subject site must be remediated and the appropriate confirmation of compliance from the applicable federal, provincial/territorial and municipal authorities
 - **Redevelopment** considerations given during the redevelopment to mitigate environmental issues, monitoring and ongoing postremediation work, project construction ongoing

Contaminated Sites Key Concepts

- Promote Redevelopment of Brownfield/ Contaminated Sites
- Protect Human Health, Environment, Ecology
- Contaminant/Contamination Assessment
- Standards/Guidelines Applicable
- Qualified/Responsible Person/Professional
- Remediation/Reclamation
- Risk Assessment/Risk Management Measures
- Regulatory Approval/ Liability Allocation
- Contaminated Sites Database or Registry



Understanding Regulatory Requirements for Brownfield Redevelopment

Ontario

- Environmental Protection Act, Part XV.1 Records of Site Condition
- Ontario Regulation 153/04: Records of Site Condition Part XV.1 of the Act
- Ontario Regulation 407/19: Amending O. Reg. 153/04
- Soil, Groundwater and Sediment Standards for Use under Part XV.1 of the Act

Manitoba

- The Contaminated Sites Remediation Act
- The Contaminated Sites Remediation Regulation, Man Reg 105/97
- Guidance documents



Understanding Regulatory Requirements for Brownfield Redevelopment

Saskatchewan

- Environmental Management and Protection Act, 2010
- Saskatchewan Environmental Code and guidance documents

Alberta

- Environmental Protection and Enhancement Act, Part V Release of Substances
- Tier 1 and Tier 2 Guidelines for Soil and Groundwater Remediation

- Environmental Management Act, Part IV Contaminated Site Remediation
- Contaminated Sites Regulation, BC Reg 375/96
- Technical Guidances



Trigger for Reporting

- Ontario: Change in use of site → Records of Site Condition (RSC)
- Manitoba: Discovery of contamination above standard
- Saskatchewan: Discovery of contamination that may cause an adverse effect
- Alberta: Duty to report observed substance release and historic contamination with adverse effect
- British Columbia: use of land for specified industrial or commercial use →
 Site Disclosure Statement
 - Zoning of land, development permits, prescribed activity
 - Disclosure to prospective purchasers



Applicable Standards

- Ontario: Soil, Ground Water and Sediments Standards for Use Under Part XV.1 of the Environmental Protection Act
- Manitoba: (i) Primary Standard: CCME, (ii) Secondary Standard: Ontario Soil, Ground Water and Sediments Standards, (iii) Tertiary Standard: Alberta Tier 1 Soil and Ground Water Remediation Guidelines
- Saskatchewan: Discharge and Discovery Reporting Chapter;
 Saskatchewan Environmental Quality Guidelines (SEQG)
- Alberta: Tier 1 and Tier 2 Guidelines for Soil and Groundwater Remediation
- **British Columbia:** Schedules 3.1, 3.2, 3.3, 3.4 of the Contaminated Sites Regulation



Technical Assessments

Ontario

 O Reg 153/04 provides Ontario-specific requirements and rules for RSC Phase 1 ESA and Phase 2 ESA.

Manitoba

- No stand-alone standards for conducting ESAs.
- National and industry standards for reference:
 - CSA Z768-01, Phase I Environmental Site Assessment (2001); CSA Z769-00, Phase II Environmental Site Assessment (2000).
 - ASTM E1527-21, Standard Practice for Environmental Site Assessments; Phase I Environmental Site Assessment Process (2021); ASTM E1903-19, Standard Practice for Environmental Site Assessments; Phase II Environmental Site Assessment Process (2019).

Technical Assessments

Saskatchewan

- Visual Site Assessment Standard Checklist
- If required, CSA Standard for Phase II is followed

Alberta

- Environmental Site Assessment Standard (2024) minimum requirements
- Used in conjunction with CSA Phase 1 ESA and Phase 2 ESA

- Preliminary Site Investigations (First and Second Stage) Areas of Potential Environmental Concern (APEC) and Potential Contaminants of Concern (PCOC)
- Detailed Site Investigations



Remedial Approaches - Intended Future Use

Ontario

- Remediation to generic site condition standards for all contaminants
- Remediation to modified generic site condition standards (MGRA)
- Risk assess to site specific standards with or without remediation (Tier 3 Risk Assessment)

Manitoba

Sites designated as contaminated site or impacted site require remediation

Saskatchewan

- Selection of appropriate Tiered endpoint
 - Tier 1 (generic most conservative)
 - Tier 2 (exposure pathway modification/elimination)
 - Tier 3 (Risk Assessment or site specific criteria)



Remedial Approaches - Intended Future Use

Alberta

- Three Risk-management options:
 - Tier 1 Soil and Groundwater Remediation Guidelines (generic remediation quidelines)
 - Tier 2 Soil and Groundwater Remediation Guidelines (site-specific remediation guidelines based on the modification of the Tier 1 guidelines)
 - Exposure Control risk

- Remediation to numerical standards or local background concentration
- Remediation to risk-based standards •



Protections from Future Regulatory Action

Ontario

- RSC not an approval, rather an "acknowledgement"
- Protections from certain Ministry orders, Ministry can always re-open
- No protection from civil lawsuits from neighbours •

Manitoba

- Post-remediation revocation of designation as a contaminated site or impacted site
- Apply for Certificate of compliance for contaminated site or impacted site

Saskatchewan

- Notice of Site Condition discloses the final environmental condition of the site that has undergone corrective action
- Transfer of responsibility for environmentally impacted site



Protections from Future Regulatory Action

Alberta

- Limited Remediation Certificates: remediation occurring on a substance release in a single area of potential environmental concern (APEC).
- Site-based Remediation Certificates: remediation occurring on all areas of potential environmental concern requiring remediation for the entirety of a site. May include multiple substance releases.
- No environmental protection order can be issued

- Voluntary Remediation Agreement: person discharged from future liability, although protection not absolute
- Independent Remediation Agreement: can apply for certificate of compliance
- Certificate of Compliance: not responsible for future remediation



Considerations for Brownfields Work

- Consult with team of professionals (legal, environmental, planning, financial)
- Environmental risks ask lots of questions!
- Conduct robust due diligence
- Understand the regulatory regime within which the brownfield redevelopment will occur and the requirements
- Complete necessary/appropriate environmental studies
- Undertake required remediation/reclamation
- Obtain available protections from regulatory action
- Initiate redevelopment and construction



Willms & Shier Environmental Lawyers

- Established nearly 50 years ago
- **Environmental, Indigenous, and Energy law**
- 17 lawyers
 - six lawyers are certified by the Law Society of Ontario as **Environmental Law Specialists**
 - lawyers called to the Bars of Alberta, British Columbia, Ontario, Northwest Territories, Nunavut and the Yukon
 - offices in Calgary, Toronto, Ottawa, and Yellowknife



Contact Information

Jacquelyn E. Stevens (403) 444-6887 / (416) 862-4828

Called to the Bar of Alberta and Ontario

jstevens@willmsshier.com



Willms & Shier Environmental Lawyers LLP

www.willmsshier.com

