

**Canadian Institute of Resources Law  
Institut canadien du droit des ressources**

# **Strategies for Cleaning Up Contaminated Sites in Alberta**

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## Foreword

A major obstacle to the goal of sustainable urban development has been the ongoing presence of historic contamination. No one wants to live, work or play next to contaminated land. These so-called brownfield sites often remain abandoned and underutilized lands that could be put to higher or better uses if the longstanding problem of contamination is addressed. This paper identifies key factors underlying the brownfield market failure and discusses ways to correct the market failure. The paper looks at improved information through capacity building, fixing structural problems associated with the regulatory system, such as the way liability rules operate within environmental legislation, and a sustainable development approach through greater municipal action. It attempts to integrate current theories of liability with the regulatory framework under federal, provincial and municipal law, and discusses the rapid expansion of municipal activism as a good approach to an effective brownfield strategy.





## **Acknowledgements**

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## Table of Abbreviations

ADR	Alternative Dispute Resolution
ARP	area redevelopment plan
ASRD	Alberta Sustainable Resource Development
Atlantic PIRI	Atlantic Partnership in RBCA Implementation
BPP	Beneficiary Pays Principle
<i>CERCLA</i>	<i>Comprehensive Environmental Response, Compensation, and Liability Act</i>
CCME	Canadian Council of Ministers of the Environment
<i>CEPA</i>	<i>Canadian Environmental Protection Act</i>
CGWA	Canadian Ground Water Association
CIP	Community Improvement Plan
CMLC	Calgary Municipal Land Corporation
CRL	Community Revitalization Levy
CRPs	Community Revitalization Plans
<i>CRR</i>	<i>Conservation and Reclamation Regulation</i>
<i>CSRA</i>	<i>Contaminated Sites Remediation Act</i>
<i>CWA</i>	<i>Canada Water Act</i>
EAB	Environmental Appeals Board
<i>EMA</i>	<i>Environmental Management Act</i>
<i>EMPA</i>	<i>Environmental Management and Protection Act</i>
EPA	Environmental Protection Agency
<i>EPEA</i>	<i>Environmental Protection and Enhancement Act</i>
EPO	environmental protection order

<i>EQA</i>	<i>Environment Quality Act</i>
ESAR	Environmental Site Assessment Repository
<i>ITA</i>	<i>Income Tax Act</i>
JVA	joint venture agreement
LADs	Land Assembly Districts
LUSTs	leaking underground storage tanks
<i>MGA</i>	<i>Municipal Government Act</i>
NRTEE	National Round Table on the Environment and the Economy
<i>NWP</i>	<i>Northern Wood Preservers</i>
OECD	Organization for Economic Co-operation and Development
PCBs	polychlorinated biphenyls
PERC	perchloroethylene
<i>PHA</i>	<i>Public Health Act</i>
PHC	Petroleum Hydrocarbons
PPP	Polluter Pays Principle
RSC	Records of Site Condition
<i>SCA</i>	<i>Safety Codes Act</i>
VCAAs	Voluntary Cleanup Agreements
WA	<i>Water Act</i>

# 1. What is the Brownfield Problem?

## 1.1. The Nature of the Problem

Over a century of industrialization in Canada has left behind a legacy of contamination.<sup>1</sup> Toxic chemicals, radioactive materials, industrial wastes, and other by-products of agricultural, bio-medical, mining, residential, industrial, and other commercial activities remain long after the activity that produces it ends. These toxins can leach into the soil and groundwater or become airborne, adversely affecting human health and the environment.<sup>2</sup>

As a secondary effect, abandoned, derelict, and underutilized land often depresses the property values of the surrounding neighbourhood and erodes the municipal tax base.<sup>3</sup> No one wants to live, work, or play next to potentially contaminated land. Abandoned sites are an eye sore and often add to security risks, not only for the site itself, but also for local homes and businesses. At the same time, lower property values mean lower local or municipal taxes, cinching the belt on otherwise tight municipal finances. For the federal and provincial governments, an inactive business generates no taxable revenues, while permitting the owner or operator to claim both capital expenditures on depreciable property and current expenditures on repairs and maintenance. In certain circumstances, the inactive business may transfer a portion of these losses to a profitable parent, associate, or subsidiary corporation. It may be more profitable to “mothball” operations than to clean the site, creating an indefinite tax drain while at the same time leaving the contamination in place where it could seep into the groundwater or migrate to neighbouring lands, if left unmonitored.<sup>4</sup>

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<sup>1</sup> See: National Round Table on the Environment and the Economy (NRTEE), *Cleaning Up the Past, Building the Future: A National Brownfield Redevelopment Strategy for Canada* (Ottawa: NRTEE, 2003) at 1 [NRTEE, *Cleaning Up the Past*].

<sup>2</sup> Canadian Council of Ministers of the Environment (CCME), *Recommended Principles on Contaminated Sites Liability*, PN 1361 (Winnipeg: CCME, 2006) at 1 [CCME, *Recommended Principles*]. See also Oni N Harton, “Indiana’s Brownfields Initiatives: A Vehicle for Pursuing Environmental Justice or Just Blowing Smoke?” (2008) 41 Ind L Rev 215 at 221.

<sup>3</sup> William W Buzbee, “Brownfields, Environmental Federalism, and Institutional Determinism” (1997) 21 Wm & Mary Env’t L & Pol’y Rev 1 at 5; Harton, *ibid* at 221-222; and Heidi Gorovitz Robertson, “One Piece of the Puzzle: Why State Brownfields Programs Can’t Lure Businesses to the Urban Cores Without Finding the Missing Pieces” (1999) 51 Rutgers L Rev 1075 at 1979.

<sup>4</sup> The migration of contamination from one site to another is particularly problematic. See: Canadian Ground Water Association (CGWA) and Geological Survey of Canada, *Fact Sheet #3: Ground Water Contamination and Protection* (Bedford, NS: CGWA, 1999) 2-6 [CGWA].

## 1.2. The Size of the Problem

Estimates for the U.S. put the number of brownfields there at between 450,000 and a million.<sup>5</sup> While no clear statistics are available for Europe, there are probably over a million such sites in the EU region.<sup>6</sup> The estimate for Australia is around 80,000 to 100,000 sites.<sup>7</sup> In Canada, the National Round Table on the Environment and the Economy's (NRTEE) estimate is somewhat more modest at about 30,000.<sup>8</sup> This estimate is probably low because of the narrow definition of brownfield often used in the Canadian literature. As one research report notes, "the rate of discovery...appears to be exceeding the rate of remediation."<sup>9</sup> As Christopher De Sousa states, "there is a dearth of information" on the problem in Canada.<sup>10</sup> A more recent estimate places the number of brownfields in Canada at between 30,000 to 50,000.<sup>11</sup> Given the similar length of industrial activity in Canada and Australia and the relatively similar populations and GDP of both countries, there is every reason to suspect the number of brownfields in Canada is closer to the estimate for Australia. There are no estimates for the number of brownfields in Alberta. A best guess would place that number in the thousands.

## 1.3. Defining Brownfield

There is no single definition of a brownfield used in Alberta. The most frequently cited definition of a brownfield is that adopted by the NRTEE.<sup>12</sup> The NRTEE defines a brownfield as:

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<sup>5</sup> US, Government Accountability Office, *Brownfield Redevelopment: Stakeholders Report That EPA's Program Helps to Redevelop Sites, but Additional Measures Could Complement Agency Efforts*, GAO-05-94 (Washington, DC: Government Accountability Office, 2004) at 1.

<sup>6</sup> Lee Oliver et al, "The Scale and Nature of European Brownfields" (Paper presented to the International Conference on Managing Urban, 13-15 April 2005).

<sup>7</sup> "Overview of brownfield redevelopment in Australia" Construction Contractor (11 September 2003), online: <<http://www.infolink.com.au/n/Overview-of-brownfield-redevelopment-in-Australia-n757503>>.

<sup>8</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at ix.

<sup>9</sup> RCI Consulting, *Brownfield Redevelopment for Housing: Literature Review and Analysis* (Ottawa: CMHC, 2004) at 2.

<sup>10</sup> Christopher De Sousa, "Brownfield Redevelopment versus Greenfield Development: A Private Sector Perspective on the Costs and Risks Associated with Brownfield Redevelopment in the Greater Toronto Area" (2000) 43 J Envtl Planning Mgmt 831 at 836.

<sup>11</sup> Luciano P Piccioni, "Financial Incentives for Brownfields Development in Canada" *Brownfield News* (August 2004), online: <[http://www.brownfieldnews.com/archive/0408August/canada\\_full.htm](http://www.brownfieldnews.com/archive/0408August/canada_full.htm)>.

<sup>12</sup> See: Jodie Hierlmeier, *Brownfield Redevelopment in Alberta: Analysis and Recommended Reforms* (Edmonton: Environmental Law Centre, 2006) at 7-8; and City of Calgary, *The City of Calgary Brownfield*

an abandoned, vacant, derelict or underutilized property where past actions have resulted in actual or perceived contamination and where there is an active potential for redevelopment.<sup>13</sup>

Most brownfields share certain common features: an abandoned, derelict, or underutilized property, an urban or suburban location, a previous industrial or commercial land use, actual or perceived contamination, and a potential for a more productive use.<sup>14</sup>

Brownfields are often associated with economically distressed areas as people, businesses, and capital move away from urban centres and industrial areas.<sup>15</sup> This is often from activities conducted on former commercial and industrial lands. However, that is not always the case. Some contaminated sites are neither industrial nor commercial, such as heritage, waterfront, and former residential properties.<sup>16</sup> Former agricultural lands and mining properties may become annexed within municipal boundaries. Former agricultural lands may have a long history of fertilizer and pesticide use, as well as mixed, light industrial use. They may have underground storage tanks or the chemical residue from heavy farm machinery and light industrial activities. In other cases, urban development may spread above former mines or dump sites, or they may extend along existing transportation routes, such as highways and railway rights-of-way. To exclude them would not be consistent with the overall purpose of brownfield regulation.

Many definitions of brownfield focus on the vague notion, which first appeared with the NRTEE, of an “active potential” for redevelopment.<sup>17</sup> To focus on the potential for redevelopment puts things in strictly development terms and may be too narrow. It risks under-inclusion. There are many contaminated sites that, for a variety of reasons, are not economically viable without significant government assistance. This under-inclusion may skew outcomes by limiting inclusion to the “low hanging fruit” — the projects with the

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*Strategy* (Calgary: City of Calgary, Environmental & Safety Management, 2007) at 3 [City of Calgary, *The City of Calgary Brownfield Strategy*].

<sup>13</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at A-3.

<sup>14</sup> See: Robert A Simons, *Turning Brownfields into Greenbacks: Developing and Financing Environmentally Contaminated Urban Real Estate* (Washington, DC: Urban Land Institute, 1998) at 3.

<sup>15</sup> See: Elizabeth Glass Geltman, *Recycling Land: Understanding the Legal Landscape of Brownfield Development* (Ann Arbor, MI: University of Michigan Press, 2000) at 4 [Glass Geltman, *Recycling Land*], and Mark Reich, “The Brownfields Program Authorization: Cleanup of Contaminated Sites” in Mark Reich & David M Bearden, eds, *Superfund and the Brownfields Issue* (New York: Novinka Books, 2003) 85 at 87.

<sup>16</sup> Ontario, Ministry of Municipal Affairs and Housing, *A Practical Guide to Brownfield Redevelopment in Ontario* (Toronto: Queen’s Printer for Ontario, 2007) at 6-7 [Ontario, *A Practical Guide*].

<sup>17</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at A-3.

best prospect for redevelopment — while ignoring some of the most contaminated sites.<sup>18</sup> Prior projects may have resolved many of the best prospective brownfields, leaving behind only the more difficult sites.<sup>19</sup> Some sites may simply be too small for private developers to redevelop economically.

To avoid under-inclusion, the U.S. Environmental Protection Agency, through the *Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)*, casts the net broadly, defining a brownfield as “real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.”<sup>20</sup> This definition does not limit itself to consideration of economic potential, as is the case with the NRTEE’s definition. Others have suggested a broader definition. For example, the Ontario Ministry of Municipal Affairs and Housing defines brownfields as “lands that are potentially contaminated due to historical, industrial or commercial land use practices, and are underutilized, derelict or vacant.”<sup>21</sup> The New Brunswick Brownfield Development Working Group goes further, defining a brownfield as “a parcel of land that is not pristine, having previously been used or developed in some way.”<sup>22</sup>

Perhaps the best definition adopted by the City of Edmonton is: “A Brownfield is a site that is under-utilized and where past activities on the site have caused environmental soil and/or groundwater contamination.”<sup>23</sup> This definition removes the vague notion of active potential for redevelopment. It is enough if the land is under-utilized. It also recognizes that contamination is not restricted to commercial or industrial lands but may be present anywhere. Finally, it gets rid of the stigma question, focusing on the presence of actual contamination. For these reasons, I recommend the adoption of the Edmonton definition.

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<sup>18</sup> See: Linda McCarthy, “Off the Mark? Efficiency in Targeting the Most Marketable Sites Rather Than Equity in Public Assistance for Brownfield Redevelopment” (2009) 23 *Econ Dev Q* 211 at 212-213. According to McCarthy, targeting the easiest sites with the least contamination or best location bypasses disadvantaged neighbourhoods, leading to social inequities.

<sup>19</sup> A Bogen, “Brownfields development issues” in CA Brebbia et al, eds, *Brownfield Sites: Assessment, Rehabilitation and Development* (Southampton, UK: WIT Press, 2002) 221 at 227.

<sup>20</sup> 42 USC §9601(39)(A) (1980).

<sup>21</sup> Ontario, *A Practical Guide*, *supra* note 16 at 6.

<sup>22</sup> New Brunswick Brownfield Development Working Group, *Final Report of the New Brunswick Brownfield Development Working Group: Options and Recommendation for Facilitating Brownfield Redevelopment in New Brunswick, Appendix “B”* (Fredericton: New Brunswick Brownfield Development Working Group, 2007) at 1-2 [NBBDWG, *Final Report*].

<sup>23</sup> Edmonton, *Brownfield Redevelopment Grant Program in Effect March 23, 2012: The Way We Green* (Edmonton: City of Edmonton, 2012) at 1.



## 1.4. Benefits of Redevelopment

The literature points to a number of benefits gained from redeveloping brownfields, including better health and safety for citizens, smarter urban growth, liveable and revitalized communities, job creation, reduced urban sprawl, and a restored tax base.<sup>24</sup> The NRTEE echoes these studies, noting a number of economic, social and environmental benefits for the community, including:

- (a) the creation of jobs;
- (b) increased competitiveness of cities;
- (c) increased export potential of Canadian cleanup technologies;
- (d) increased tax base;
- (e) improved quality of life in neighbourhoods;
- (f) removal of threats to human health and safety;
- (g) affordable housing;
- (h) reduced urban sprawl;
- (i) restoration of environmental quality; and
- (j) improved air quality and reduced greenhouse gas emissions.<sup>25</sup>

As such, brownfields may be viewed as a central pillar of urban revitalization and development.

## 1.5. Obstacles to Redevelopment

The literature identifies five major obstacles to brownfield redevelopment, each reflecting a problem of uncertainty:

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<sup>24</sup> See: Gorovitz Robertson, *supra* note 3 at 1079; Glass Geltman, *Recycling Land*, *supra* note 15 at 8; Dan Hara, “Correcting Market Failures: The Social Benefit/Cost Analysis of Brownfields Redevelopment” in Ahab Abdel-Aziz & Nathalie Chalifour, eds, *The Canadian Brownfields Manual*, looseleaf (Markham, ON: LexisNexis Canada, 2004) at §§10.14-10.15 [Hara, “Correcting Market Failures”]; Juha Siikamäki & Kris Wernstedt, “Turning Brownfields into Greenspaces: Examining Incentives and Barriers to Revitalization” (2008) 33 J Health Politics, Policy & L 559 at 559-564, and Harton, *supra* note 2 at 226-227.

<sup>25</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at ix-x.

- (a) the risk of liability for the cost of cleanup;
- (b) the high costs of cleanup and redevelopment;
- (c) a lack of adequate financing;
- (d) the uncertain standard of cleanup and future risk; and
- (e) the regulatory delays.<sup>26</sup>

According to the Canadian Council of Ministers of the Environment (CCME), uncertainty “may lead to inaction or to inappropriate action.”<sup>27</sup> It gives rise to what Elizabeth Glass Geltman calls “brownfield paralysis”<sup>28</sup> and what Cynthia Brooks calls “property gridlock”,<sup>29</sup> a market failure where potentially productive lands remain abandoned and underutilized.<sup>30</sup> In a nutshell, this is the brownfield problem.

## 1.6. Purpose

The purpose of this paper is two-fold. First, it seeks to examine the existing regulatory framework for remediation of brownfields in Alberta. Second, it explores mechanisms that may improve outcomes.

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<sup>26</sup> See: Hara, “Correcting Market Failures”, *supra* note 24 at 10-1; RCI Consulting, *supra* note 9 at 6-44; Gorovitz Robertson, *supra* note 3 at 1083-1091; and Kris Wernstedt et al, *The Brownfield Phenomenon: Much Ado about Something or the Timing of the Shrewd?*, Discussion Paper 04-46 (Washington, DC: Resources for the Future, 2004) at 13.

<sup>27</sup> CCME, *Recommended Principles*, *supra* note 2 at 1.

<sup>28</sup> Glass Geltman, *Recycling Land*, *supra* note 15 at 3.

<sup>29</sup> CN Brooks, “Integrating sustainable development and brownfields reuse – principles and practice” in E Beriatos & CA Brebbia, eds, *Brownfield Sites IV: Prevention, Assessment, Rehabilitation and Development of Brownfield Sites* (Southampton, UK: WIT Press, 2008) 3 at 5.

<sup>30</sup> According to Dan Hara, *Market Failures and The Optimal Use of Brownfield Redevelopment Policy Instruments* (Ottawa: Hara Associates, 2003) at 2 [Hara, *Market Failures*] a “market failure” occurs when “the incentives experienced by participants in the market place do not reflect all of the relevant costs and benefits to society as a whole, [so] it can be shown that markets will not produce the result that maximize[s] the common good .... In the case of brownfields, there are a variety of third party and collective benefits to brownfield redevelopment. Since these are not captured by private sector self-interest, there is less redevelopment of brownfields than would be optimal for the common good.”

## 2. The Legislative and Regulatory Framework for Brownfields in Alberta

### 2.1. The Constitutional and Jurisdictional Framework

In Alberta, brownfields are largely governed by provincial environmental protection legislation; but they also attract regulation through a number of federal environmental protection instruments and municipal land-use planning and development bylaws.<sup>31</sup> This means that the management of brownfields, as with many other environmental issues, is “subject to a complex framework of laws and regulations.”<sup>32</sup> This is largely from the overlap, concurrence, and conflict created by the division of powers in the *Constitution Act, 1867*.<sup>33</sup> Since environmental matters are not specifically enumerated by the Canadian Constitution, which governmental authority has jurisdiction over brownfields and the extent of that jurisdiction must be gleaned from the existing division of powers.<sup>34</sup> Under section 92, the provincial authority has control over property and civil rights and matters of a local or private nature within the province, along with a host of other related categories such as municipalities and local works and undertakings.<sup>35</sup> The federal authority, on the other hand, has jurisdiction under section 91 over such things as criminal law, taxation, trade and commerce, navigable waterways and fisheries, bankruptcy and insolvency, and the residual laws of general application, for the peace, order and good government of Canada.<sup>36</sup> Neither authority has exclusive jurisdiction in environmental matters but share responsibility in this area. As the PollutionWatch Project

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<sup>31</sup> For a review of the jurisdictional issues, see: CCME, *Guidance Document on the Management of Contaminated Sites in Canada*, PN 1279 (Winnipeg: CCME, 1997) at 4-9 [CCME, *Guidance Document*].

<sup>32</sup> *Ibid* at 4.

<sup>33</sup> (UK) 30 & 31 Vict, c 3 [*Constitution Act, 1867*].

<sup>34</sup> As La Forest J notes in *Friends of the Oldman River v Canada (Minister of Transport)*, [1992] 1 SCR 3 at 72-73 [*Friends of the Oldman River*]:

It must be recognized that the environment is not an independent matter of legislation under the *Constitution Act, 1867* and that it is a constitutionally abstruse matter which does not comfortably fit within the existing division of powers without considerable overlap and uncertainty .... In my view the solution to this case can more readily be found by looking first at the catalogue of powers in the *Constitution Act, 1867* and considering how they may be employed to meet or avoid environmental concerns. When viewed in this manner it will be seen that in exercising their respective legislative powers, both levels of government may affect the environment, either by acting or not acting.

<sup>35</sup> *Constitution Act, 1867*, *supra* note 33, ss 92 and 92A.

<sup>36</sup> *Constitution Act, 1867*, *ibid*, s 91.

notes “the dividing line between their respective jurisdictions often is unclear and is only slowly beginning to emerge.”<sup>37</sup>

The 1980s and 90s represent a period of conflict when both federal and provincial authorities in Canada sought to fill the environmental field with their own legislative measures aimed at addressing environmental problems. It is in this period that both Parliament and most provincial and territorial authorities passed important environmental statutory instruments to address pollution, such as the federal *Canadian Environmental Protection Act (CEPA)*.<sup>38</sup> The high-water mark for this period can be found in cases such as *R. v. Hydro-Québec*<sup>39</sup> and *Friends of the Oldman River Society v. Canada (Minister of Transport)*,<sup>40</sup> where the Supreme Court of Canada upheld the federal authority to regulate for environmental matters concurrently with the provincial authorities. Efforts to harmonize key federal and provincial regulation since that time have reduced much of the direct conflict. These efforts led to the formation of the CCME. The *Canada-wide Accord on Environmental Harmonization*, reached in 1998 through the CCME, represents a key shift in Canadian law and policy, whereby the responsibility for managing some federal laws passed from federal agencies to provincial and territorial agencies.<sup>41</sup> Some scholars identify this trend with a general “regulatory retreat”, where the federal government withdrew from some areas in favour of the provinces and territories, while at the same

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<sup>37</sup> PollutionWatch Project, *A Summary of Canadian and Selected Provincial Regulations and Policy on Toxic Substances* (Toronto: Canadian Environmental Law Association, 2005) at 3.

<sup>38</sup> While these statutes arose during this period, it would be wrong to view these environmental instruments as new. Each of these statutes had predecessors that addressed many of the same environmental issues.

<sup>39</sup> *R v Hydro-Québec*, [1997] 3 SCR 213. In the *Hydro-Québec* case, the Supreme Court of Canada addressed the federal power to legislate for environmental protection under its plenary criminal law power. La Forest J, for a 5-4 majority, held that the federal regulations of toxic substances were a valid exercise of its criminal law power. However, federal authority in this area is not exclusive. The Court left it open for the provinces to legislate concurrently in the same field of activity subject to the provincial competence to do so.

<sup>40</sup> See: *Friends of the Oldman River*, *supra* note 34. In this case the Supreme Court of Canada faced the question of whether the federal authority had the power to order an environmental assessment on a dam project, a local work or undertaking within the Province of Alberta, and undertaken by the Province. La Forest J, for the majority, refused to construe a project as either a federal or provincial work or undertaking, thus subject to the exclusive (or even primary) jurisdiction of one or the other authority. Both federal and provincial law may concurrently govern a given activity. To determine whether an impugned law is *ultra vires* consideration must be given to whether or not the legislation, in pith and substance, is directed to a matter within the competence of the enacting authority.

<sup>41</sup> See: CCME, *A Canada-wide Accord on Environmental Harmonization* (Winnipeg: CCME, 1998).

time provincial governments downloaded some of their responsibility to municipalities and, through deregulation, to the private sector.<sup>42</sup>

Over the past decade, many municipalities have turned their attention to the brownfields problem as an important roadblock to effective urban growth and development.<sup>43</sup> Urban communities began adopting strategic frameworks to address brownfields within their overall urban development plans. For example, in October 2009 the City of Calgary approved a brownfield reclamation strategy, focused primarily on the cleanup of city-owned brownfield sites, but also recognizing that private parties may require some assistance in bringing brownfields back into productive use.<sup>44</sup>

So far, the courts have responded positively to municipal activism in the environmental law field by upholding municipal efforts to extend their authority for the general welfare of the community. In *114957 Canada Ltée (Spraytech, Société d'arrosage) v. Hudson (Town)*, also known as the *Spraytech* case, Justice L'Heureux-Dubé found that a bylaw to regulate pesticide use within the boundaries of the Town of Hudson, Québec, developed under an implicit power for the general welfare of the community, was a valid extension of municipal law designed to protect public health and safety.<sup>45</sup> There is nothing preventing consonant regulation by municipalities even where federal and provincial rules already exist.<sup>46</sup>

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<sup>42</sup> See: Neil Hawke, "Canadian Federalism and Environmental Protection" (2002) 14 J Envtl L 185 at 185. The Canadian Environmental Network is much more critical, stating:

Many of the problems with CEPA are a result of a failure to fully implement CEPA rather than problems with the actual words in the legislation. The federal government has not allocated sufficient human and fiscal resources to implement the Act. It has diverted much of its attention to harmonization agreements with the provinces and territories (devolution) and the promotion of voluntary, as opposed to regulatory, environmental protection measures.

See also: Canadian Environmental Network Toxics Caucus CEPA Steering Committee, *The ENGO Agenda for the Review of the Canadian Environmental Protection Act (1999)*, (Ottawa: Canadian Environmental Network, 2006) at 8.

<sup>43</sup> See, for example: City of Niagara Falls, *Niagara Falls Brownfields Redevelopment: Community Information Package* (Niagara Falls: City of Niagara Falls, 2004); City of Hamilton, *ERASE: Environmental Remediation and Site Enhancement* (Hamilton: City of Hamilton, 2005); and City of Edmonton, *The City of Edmonton's 2006 Environmental Strategic Plan* (Edmonton: City of Edmonton, 2006).

<sup>44</sup> The City of Calgary's brownfield strategy, approved in October 2009, adopts the proposed strategy prepared for the City in 2007. See City of Calgary, *The City of Calgary Brownfield Strategy*, *supra* note 12.

<sup>45</sup> *114957 Canada Ltée (Spraytech, Société d'arrosage) v. Hudson (Town)*, [2001] 2 SCR 241 [*Spraytech*].

<sup>46</sup> *Ibid* at paras 39-42.

This period of regulatory retreat, deregulation and municipal activism affects the regulatory system in at least three important ways:

- 1) It means that for the most part the federal government has refrained from legislating in respect to brownfields, preferring harmonization agreements, except in respect to federal public lands. For federal public lands, such as the decommissioning of former military bases, the federal government has adopted a separate plan involving federal funds, oversight, and rules.<sup>47</sup> Instead of legislating for brownfields generally, the federal government, through the power of the public purse, finances some brownfield cleanup and redevelopment programs through the funding of municipal infrastructure efforts.<sup>48</sup>
- 2) Some provinces have explicitly increased municipal authority over contaminated sites.<sup>49</sup> In Ontario, for example, the *Brownfields Act* permits municipalities to do work, and to offer grants, loans and tax relief.<sup>50</sup> In British Columbia the Minister may delegate its powers to a municipality for administering most aspects of site profiles and the investigation, cleanup and remediation of contaminated sites.<sup>51</sup>
- 3) Municipal and local authorities have extended their regulatory action through environmental assessment requirements at the planning stage and the use of area-

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<sup>47</sup> See: Canada, *Taking action on federal contaminated sites: An environmental and economic priority* (Ottawa: Government of Canada, 1999) and Dillon Consulting Ltd., *A Federal Approach to Contaminated Sites* (Ottawa: Contaminated Sites Management Working Group, 1999).

<sup>48</sup> The federal approach aims to support new and revitalized municipal infrastructure. First, the federal government currently provides \$33 billion to the provinces and territories to improve existing public infrastructure, with one-half paid directly to municipalities under the Building Canada program. A portion of these funds are ear-marked for brownfield redevelopment, see: Canada, *Building Canada: Modern Infrastructure for a Strong Canada* (Ottawa: Her Majesty the Queen in Right of Canada, 2007) [Canada, *Building Canada*]. Second, the federal government established the Green Municipal Fund in 2000 to stimulate investment in innovative municipal projects and to improve municipal environmental practices, see: Federation of Canadian Municipalities, *Green Municipal Funds Annual Report 2001* (Ottawa: Federation of Canadian Municipalities, 2001). In 2008 the federal government added \$550 million to the fund for low interest loans to assist municipalities with brownfield remediation costs, see: FCM Centre for Sustainable Community Development, News Release, “FCM’s Green Municipal Fund Offers Low-Interest Loans for Brownfield Remediation” (10 July 2008). Finally, the federal “New Deal” program increased the GST rebate and federal portion of the HST for municipalities to 100% from 57.14%, adding about \$7 billion to municipal revenues over ten years, see: Nathalie Chalifour, “Progress at the National Level- The National Round Table on the Environment and the Economy’s National Brownfield Redevelopment Strategy” in Abdel-Aziz & Chalifour, *supra* note 24 11-1 at §§11-57-11.59.

<sup>49</sup> Michael Bowman & Michael Millar, “Municipal Jurisdiction over Brownfields” in Abdel-Aziz & Chalifour, *supra* note 24 13-1 at §13.5.

<sup>50</sup> *Ibid* at §§13.45-13.48.

<sup>51</sup> *Ibid* at §13.61.

wide redevelopment plans. These plans, recently adopted in British Columbia,<sup>52</sup> Ontario,<sup>53</sup> Alberta,<sup>54</sup> Saskatchewan,<sup>55</sup> and Manitoba,<sup>56</sup> permit municipalities to develop long-term redevelopment and revitalization plans for a designated area of the city.<sup>57</sup>

## 2.2. The Environmental Protection Framework

Alberta Environment (now Alberta Sustainable Resource Development [ASRD]) enumerates three policy goals of Alberta's Framework for the Management of Contaminated Sites: (1) pollution prevention, (2) health protection, and (3) productive use.<sup>58</sup> The regulatory system for dealing with contamination calls for a prospective approach.<sup>59</sup> Remediation of past contamination serves only a subsidiary purpose. According to Alberta Environment, a prospective approach is adopted because remediation programs are expensive and have shown limited success in restoring the quality of contaminated land or water.<sup>60</sup> Laws and policies that encourage pollution

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<sup>52</sup> British Columbia offers a Revitalization Area Tax Exemption of up to ten years to private developers for brownfields, see *Community Charter*, SBC 2003, c 26, Part 7 and *Vancouver Charter*, SBC 1953, c 55, s 396E.

<sup>53</sup> The Ontario *Brownfields Act* introduced the Brownfields Financial Tax Incentive Program in 2001, which permits municipalities to provide tax assistance to defray a portion of remediation costs when a Community Improvement Plan (CIP) is declared, see: *Brownfields Statute Law Amendment Act*, SO 2001, c 17. It also permits municipalities to apply for matching education property tax assistance from the Province for financing area-wide projects. Since legislative changes in 2006, municipalities no longer need Provincial authorization to implement a CIP, see: *Municipal Statute Law Amendment Act, 2006*, SO 2006, c 32. In addition, Ontario introduced tax increment financing on a pilot basis in 2006, see: *Tax Increment Financing Act, 2006*, SO 2006, c 33 (Sch Z.7).

<sup>54</sup> Amendments to Alberta's *Municipal Government Act*, RSA 2000, c M-26, Part 10, Division 4.1 in 2005 [MGA] introduced tax increment financing to Alberta. A municipality in Alberta may designate a portion of their property taxes, including the education portion, for a Community Revitalization Levy (CRL). In Calgary, for example, the City designated The Rivers District for revitalization and improvements in 2008, see: City of Calgary, News Release, "Community Revitalization Levy Notices" (4 January 2008).

<sup>55</sup> *Cities Act*, SS 2002, c C-11.1, ss 281.1-281.2.

<sup>56</sup> *The Community Revitalization Tax Increment Financing Act*, CCSM, c C166.

<sup>57</sup> On the use of municipal brownfield redevelopment incentive programs generally see: Luciano P Piccioni, "Municipal Use of Brownfields Redevelopment Incentive Programs" in Abdel-Aziz & Chalifour, *supra* note 24 13-1.

<sup>58</sup> Alberta Environment, *Alberta Tier 1 Soil and Groundwater Remediation Guidelines* (Edmonton: Alberta Environment, 2007) at 1 [Alberta Environment, *Alberta Tier 1*].

<sup>59</sup> *Ibid* at 4.

<sup>60</sup> *Ibid*.

prevention efforts are more cost effective and a better use of limited government resources.<sup>61</sup> Certainly this is true in the case of Leaking Underground Storage Tanks (LUSTs), where it is estimated that even after extensive and costly cleanup at least 50% of the contamination remains in the ground.<sup>62</sup> Prevention is therefore the touchstone of the provincial approach to contamination.

### **2.2.1. Provincial Environmental Protection Legislation**

The main provincial statute dealing with brownfields in Alberta is the *Environmental Protection and Enhancement Act (EPEA)*. *EPEA* governs the liability for costs and the responsibility for cleanup of brownfields, as well as the manner in which remediation or reclamation efforts are conducted. Orders under *EPEA* are essentially remedial in nature.<sup>63</sup> As Marceau J. points out in *McCull-Fontenac Inc. v. Alberta (Minister of Environment)* “[*EPEA*] is, by its nature, a public protection statute.”<sup>64</sup> The main purpose of *EPEA* is “to support and promote the protection, enhancement and wise use of the environment” while recognizing important social goals, including, among others, human health and ecosystem integrity; economic development; sustainable development and intergenerational equity; environmental protection; research and development; public planning and decision-making; interjurisdictional cooperation; the polluter pays principle (PPP); and comprehensive and responsive actions.<sup>65</sup> This Part reviews the regulatory process for brownfield cleanup and redevelopment under Alberta’s *EPEA*.

#### **2.2.1.1. Discovering and Identifying Brownfields**

In practical terms, regulatory action comes only after a brownfield site is discovered and a regulator determines that some corrective action is necessary. If a brownfield site remains undiscovered, the problem can remain a persistent health and environmental issue for years, even decades. Thus, it is important that the regulatory system be able to effectively identify past contamination problems.

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<sup>61</sup> *Ibid.*

<sup>62</sup> Renée M Craig, *Underground Storage Tanks: A Legal Review*, 2d ed (Edmonton: Environmental Law Centre, 1995) at xii.

<sup>63</sup> See *Imperial Oil Ltd and Devon Estates Ltd v Director, Enforcement and Monitoring, Bow Region, Regional Services, Alberta Environment re: Imperial Oil Ltd* (21 May 2002) EAB Appeal No 01-062-R at 44 [*Imperial Oil and Devon Estates*].

<sup>64</sup> Marceau J in *McCull-Fontenac Inc v Alberta (Minister of Environment)*, 2003 ABQB 303 (QB) at para 110 [*McCull-Fontenac*].

<sup>65</sup> *Environmental Protection and Enhancement Act*, RSA 2000, c E-12, s 2 [*EPEA*]. See also the comments of Justice Nason in *Imperial Oil and Devon Estates*, *supra* note 63 at paras 31-32.



In Alberta, there are two main ways a brownfield comes into the regulatory process.<sup>66</sup> The first comes under the strict prohibitions against the release of contaminants that may cause, is causing, or has caused an adverse effect.<sup>67</sup> This is found in Part 5, Division 1 of *EPEA*.<sup>68</sup> These provisions target “toxic releases” that adversely affect human health and the environment, including the deleterious effects of past contamination. The second way brownfields enter the regulatory process is the targeting of blighted lands directly. Where a toxic release may cause, is causing, or has caused a “significant” adverse effect, Part 5, Division 2 permits the Director to designate a site as a contaminated site.<sup>69</sup> This represents an extension by “accretion” to better address the problems associated with contaminated lands, but is not intended to replace other legislative tools.<sup>70</sup> Many

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<sup>66</sup> Environmental Law Centre, *A Review of Regulatory Approaches to Contaminated Site Management* (Edmonton: Alberta Environment, 2004) at 7. There are also specific provisions respecting potable water, hazardous substances, pesticides, hazardous recyclables, wastes, and hazardous wastes, see *EPEA*, ss 148, 155, 163, 169, 176, 188 & 192.

<sup>67</sup> Adverse effect means “impairment of or damage to the environment, human health or safety or property”, *EPEA*, s 1(b). According to the Environmental Appeal Board, an adverse effect may be reasonably found where “there is a risk of impairment or damage either occurring in the future or having already occurred”, see: *Imperial Oil and Devon Estates*, *supra* note 63 at 50. Ann Broughton suggests that the test for “adverse effect” should be “whether the substance, by its very nature, may impair the environment, not whether it has done so in the particular circumstances”, see: Ann A Broughton, “Release of Substances: Release Reporting and Remediation” (Papers delivered to an Insight Seminar, Toronto, 29 September 1993) at 12. The threshold for “adverse effect” is low, requiring only that a release may impair the environment even if no actual impairment or damage arises, *ibid* at 19.

<sup>68</sup> *EPEA*, ss 108 & 109. Sections 108 and 109 prohibit (a) the release or permitted release, knowingly or otherwise, of a substance in excess of that expressly prescribed by an approval or the regulations; (b) the release or permitted release, knowingly or otherwise, of a substance that causes or may cause a significant adverse effect; or (c) the knowing release or permitted release of a substance in excess of that expressly prescribed by a code of practice. When the provisions of subsections 108(1) and (2) are compared, it would seem that a release or permitted release in excess of that prescribed by an approval or the regulations does not require knowledge, so its restatement in subsection 108(1) seems redundant. However, a release or permitted release in excess of a code of practice clearly requires knowledge. Curiously, section 109 refers to significant adverse effect, however, only an adverse effect is required to trigger the reporting, remediation or environmental protection order provisions of Division 1.

<sup>69</sup> *EPEA*, s 125. What constitutes a significant adverse effect is undefined in *EPEA*. However, Alberta Environment suggests that “[a]n adverse effect can become significant when there is an actual or high probability of impact which has or could have a severe consequence on human health, safety or the environment”, see: Alberta Environment, *Guidelines for the Designation of Contaminated Sites Under the Environmental Protection and Enhancement Act*, T/536 (Edmonton: Alberta Environment, 2000) at 2 [Alberta Environment, *Guidelines for the Designation of Contaminated Sites*].

<sup>70</sup> *Imperial Oil and Devon Estates*, *supra* note 63 at para 172. By “accretion” is meant that contaminated sites under *EPEA* should not be viewed a distinct category of the overall contamination problem, but rather it should be seen as an extension of toxic releases, generally, that are more onerous to health, safety and the environment. Thus, the distinction between “adverse effect” and “significant adverse effect” is one of quantity rather than quality.

provinces address brownfields under legislative provisions similar to Part 5, Division 2 of *EPEA*, carving out a distinct category for addressing contaminated sites. However, in Alberta the practice has been to address brownfields either as a toxic release issue under Part 5, Division 1 of *EPEA* or as a conservation and reclamation matter under Part 6 of *EPEA*.<sup>71</sup> Part 6 of *EPEA* deals with regulated activities and mandates that operators of specified activities take any necessary conservation and reclamation measures to restore lands when they have completed those activities.<sup>72</sup>

Once discovered, provincial authorities have a variety of regulatory tools available to manage the cleanup and remediation of brownfields. This includes Ministerial orders that direct parties to prevent, abate or remediate any contamination.

Until recently, Alberta did not keep formal, public, and centralized records of past contamination. Historic contamination at brownfield sites was difficult to identify or track because information was not readily available. Compounding this information vacuum, brownfield sites only came to the regulator's attention, if at all, through self-reporting or during the environmental assessment phase for new construction or land development projects.<sup>73</sup> If the site remained untouched, meaning no new construction or development was proposed, the historic uses and the current condition of the land remained somewhat of a mystery. More troublesome for regulators in Alberta, *EPEA* only imposed self-reporting on polluters (those who released or who caused or permitted a release, and those who had control of a released substance).<sup>74</sup> Beyond the obvious difficulties faced by regulators whenever polluters are expected to self-report their

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<sup>71</sup> According to Environmental Law Centre, *supra* note 66 at 1, there have been only five designations since 1993, the most recent in 1996.

<sup>72</sup> *EPEA*, s 137 and *Conservation and Reclamation Regulation*, Alta Reg 115/93, s 1(t) [*CRR*]. The Act refers to "specified lands" where certain regulated activities are conducted. These regulated activities, listed in the Schedule of Activities attached to *EPEA*, include such varied activities as well sites and petroleum facilities, mines and quarries, stockyards, pipelines, railways and roadways, bio-medical and research laboratories, repair shops and scrap yards, manufacturing and processing facilities, warehouses and storage buildings, dumps and landfills, public utilities, and industrial plants.

<sup>73</sup> Even the current environmental assessment system is a relative new mechanism.

<sup>74</sup> *EPEA*, s 110. The term "causes or permits a release" expands the classes of persons who may be held liable from those who merely "release" the contaminant into the environment. According to Ann Broughton, it extends liability from those who did the deed, perhaps a transporter hired to move the contaminant, to include those who controlled the activity or who, despite having the responsibility to act to prevent a release, exercised passive non-involvement, such as the owner of the contaminant. See: Broughton, *supra* note 67 at 11-12. In any case, the focus of liability is on polluters and those who benefit from the activity that caused the pollution, and does not directly extend liability to landowners and occupiers.

pollution, landowners or occupiers are not obligated to report the presence of contamination.<sup>75</sup>

As a consequence, it is possible for historic contamination to remain undetected by the regulator. This creates an untenable situation: some past contamination may remain unknown and may continue to adversely affect human health and the environment, and yet a developer, even with the use of the best commercial practices, or a regulator, even with the best current investigative tools available, may not be able to detect the full extent of a contamination problem until significant time and money has been spent.

Some provinces and municipalities have begun developing better screening tools to identify potential brownfield sites within their jurisdiction. These tools include contaminated site profiles and registries, and contaminant risk mapping.<sup>76</sup> Alberta operates an Environmental Site Assessment Repository (ESAR) for petroleum storage tanks, spills, contaminated sites, and sites where an environmental site assessment has been conducted pursuant to a land purchase agreement.<sup>77</sup> The ESAR provides information on properties with environmental assessments.<sup>78</sup> It does not include information on reclamation certificates, incident reports, or *EPEA* approvals, and it is not mandatory for all commercial and industrial lands as is the case in British Columbia.<sup>79</sup> Thus, the ESAR is somewhat limited in its ability to identify potential brownfield sites.<sup>80</sup>

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<sup>75</sup> The list of persons responsible for a toxic release does not include the landowner or occupier of a brownfield. Landowners and occupiers only come under regulatory review where a site is designated as a contaminated site under Part 5, Division 2, see *EPEA*, s 107(c).

<sup>76</sup> Delcan Corporation, Golder Associates Ltd & McCarthy-Tétrault, *Removing Barriers: Redeveloping Contaminated Sites for Housing* (Ottawa: NRTEE, 1997) at 50-51.

<sup>77</sup> See: *Disclosure of Information Regulations and Ministerial Order*, Alta Reg 23/2004 and Alberta Environment, *Record of Site Condition User Guide* (Edmonton: Alberta Environment, 2009) at 10-13.

<sup>78</sup> Alberta Environment, *Environmental Site Assessment Repository: Using the ESAR Document Publishing Application* (Edmonton: Government of Alberta, 2009) at 2.

<sup>79</sup> In British Columbia an owner or vendor of a former industrial or commercial site or a person who seeks to rezone or redevelop such lands must submit a site profile to the authorities: see: *Environmental Management Act*, Part 4, Division 1 (Identification of Contaminated Sites) [EMA]. The Registry contains information on all sites that have been investigated and cleaned up since 1988, see: British Columbia, Ministry of Environment, *Procedures for processing site profiles* (Victoria: Ministry of Environment, 2010), “19 Facts on Contaminated Sites: The Site Profile System” (June 2010), and “20 Facts on Contaminated Sites: The Site Registry” (February 2006); and Ahab Abdel-Aziz, “Regulatory Liability” in Abdel-Aziz & Chalifour, *supra* note 24 at §5.5.

<sup>80</sup> *Ibid.*

Site profiles and registries provide regulators and the public with better information on the condition of former commercial and industrial lands.<sup>81</sup> They act as a warning to any potential purchaser of the current state of a site and encourage the use of risk assessment during the due diligence phase of a real estate transaction.<sup>82</sup> These lists can also reduce perceptions of contamination, lead to faster identification of potential contamination problems, and foster greater acceptance of the goals of brownfield redevelopment.<sup>83</sup>

Risk mapping may also assist in the identification of potential brownfield sites. It involves the use of city records or aerial photographs to locate areas where there is a strong likelihood of past contamination, even where no on-site investigation has been conducted.<sup>84</sup> It is designed to promote better land-use planning for municipal authorities.<sup>85</sup> The benefits of risk mapping seem rather obvious, but there remains considerable reluctance to adopt risk mapping due to the stigma that might attach to listed properties, the lack of necessary resources to build and maintain such a list, and the risk of municipal liability that might arise from errors in the database.<sup>86</sup>

### 2.2.1.2. Ministerial Directives: Prevention or Remediation?

In Alberta, the most common form of Ministerial order is the environmental protection order (EPO). The purpose of an EPO is essentially remedial: “[i]ts primary concern is not ascribing fault, but rather determining an effective and efficient method of resolving a problem.”<sup>87</sup> The Director may issue an EPO to address any toxic release into the environment, even where the release occurred before the coming into force of *EPEA*.<sup>88</sup> Under section 113 an EPO may direct that a polluter investigate, monitor and report on the condition of the land, and take all reasonable measures to prevent, abate and control

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<sup>81</sup> Ontario, Ministry of Environment, *Records of Site Condition: A Guide on Site Assessment, the Cleanup of Brownfield Sites and the Filing of Records of Site Condition*, PIBs 4728e (Toronto: Queen’s Printer for Ontario, 2004) at 31 [Ontario, *Records of Site Condition*].

<sup>82</sup> RCI Consulting, *supra* note 9 at 31.

<sup>83</sup> Delcan, *supra* note 76 at 50.

<sup>84</sup> *Ibid* at 50-51.

<sup>85</sup> RCI Consulting, *supra* note 9 at 31.

<sup>86</sup> *Ibid*.

<sup>87</sup> *Legal Oil & Gas Ltd v Alberta (Minister of Environment)*, 2000 CarswellAlta 531 at para 28 [*Legal Oil* 2000].

<sup>88</sup> *EPEA*, s 113(4). Pollution that occurred prior to the coming into force of *EPEA* (1 September 1993), even where the polluting activity has been permanently discontinued prior to that date, must be reported, and the past polluter remains liable for site assessment and cleanup, see: *EPEA*, ss 112(2) & 113(5).

any contamination found there.<sup>89</sup> In addition, a polluter has standing duty to restore and remediate under section 112.<sup>90</sup>

One potential issue with this approach is its reliance on prevention, abatement and control measures. Prevention, abatement and control efforts focus on the short-term removal of contaminants that present an immediate risk to human health and the environment and the long-term containment of any remaining contaminants. These measures, while helpful, should only be viewed as a useful first step in the cleanup and remediation of a brownfield. In the case of the former Gulf Oil refinery, located as part of the Inglewood Wildlands in Calgary, for example, Petro-Canada Ltd. has never fully remediated the site.<sup>91</sup> It remains a city park and wildlife refuge with planned cleanup expected to continue over a 25 year span.<sup>92</sup> Even in the more publicized Lynnview Ridge brownfield in Calgary, the former neighbourhood is designated for a city park, with the efforts of the City of Calgary and Imperial Oil Ltd. focused on the management and containment of the contaminants rather than on the complete cleanup of the site.<sup>93</sup> Any measure that demands only a limited response to the contamination problem should be suspect.

A second potential issue with this approach is its failure to place any positive obligations on landowners or occupiers. An EPO issued under Part 5, Division 1 (the release of substances provisions) is directed at the polluter or those who benefitted from the activity that caused the pollution.<sup>94</sup> It does not expressly extend obligations to landowners or occupiers.<sup>95</sup> This regulatory gap may result in less optimal regulation of brownfields for a number of reasons. First, a current landowner has control over the source of the contamination and may be in the best position to respond to an emergency.<sup>96</sup> Thus, a landowner should be required, at a minimum, to report suspected

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<sup>89</sup> *EPEA*, s 113(3).

<sup>90</sup> *EPEA*, s 112.

<sup>91</sup> According to API, News Release, “Inglewood Wildlands” (13 September 2006), online: API <<http://www.api.org/ehs/partnerships/environmental/inglewoodwildlands.cfm>>, Petro-Canada has removed 1.5 million litres of subsurface oil from the site since 1978. See also: Hierlmeier, *supra* note 12 at 48-49.

<sup>92</sup> Hierlmeier, *ibid* at 49.

<sup>93</sup> “Greenspace to replace contaminated neighbourhood” CBC News (19 July 2007), online: CBC <<http://www.cbc.ca/canada/calgary/story/2007/07/19/imperial-lynnview.html>>.

<sup>94</sup> *EPEA*, s 110.

<sup>95</sup> See: *McColl-Frontenac In. v. Director, Enforcement and Monitoring, Bow Region, Environmental Service, Alberta Environment* (7 December 2001) EAB Appeal No 00-067-R at paras 108-109. This is an important difference from other provinces.

<sup>96</sup> British Columbia, Advisory Panel on Contaminated Sites, *Final Report of the Minister’s Advisory Panel on Contaminated Sites*, by Margaret Eriksson et al (Vancouver: Advisory Panel on Contaminated Sites, 2003) at 97 [BC Advisory Panel, *Final Report*].

contamination to the regulator.<sup>97</sup> Second, a current landowner may stand to benefit from any cleanup efforts through higher land values and the removal of any stigma attached to the land.<sup>98</sup> Not holding a current landowner liable may exacerbate the free rider problem.<sup>99</sup> Third, holding the former landowner responsible also serves a gatekeeping function.<sup>100</sup> In the case of past contamination, a former landowner was in a better position than regulators to observe and control what happened on its land. It could have chosen to prevent risky activities from being conducted on its land. Fundamental justice permits retroactive liability where an act is morally objectionable and the wrongdoer knew of its immoral character at the time.<sup>101</sup> As the Environmental Appeals Board (EAB) notes in *Imperial Oil and Devon Estates*, the obligations prohibiting contamination “did not spring up from a legal vacuum” but stem from previous statutory and common law roots.<sup>102</sup>

Where there is a “significant adverse effect”, Part 5, Division 2 (the contaminated sites provisions) an EPO may go even further. It may order that the land be restored or secured from contamination.<sup>103</sup> It also extends responsibility for a contaminated site to a wider range of persons, including current and previous landowners, successors, assignees, executors, administrators, receivers, receiver-managers, trustees, principals, and agents.<sup>104</sup> In practice, however, contaminated site designation is rare in Alberta.<sup>105</sup> The Director may only designate a site as a contaminated site where there is a “significant adverse effect” and only after notice and an appeal process.<sup>106</sup> In addition, the Director is to take into consideration a number of factors when considering a Part 5, Division 2

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<sup>97</sup> Interestingly, a person who releases or causes or permits the release of a toxic substance, a person who has control of a toxic substance, and a police officer or employee of a local authority or other public authority who is informed of or who investigates a toxic release each have reporting obligations. See: *EPEA*, s 110. An owner of contaminated land does not.

<sup>98</sup> *Ibid.*

<sup>99</sup> The free rider problem arises whenever a party does not shoulder its fair share of the burden. See the discussion in Tom H Tietenberg, “Indivisible Toxic Torts: The Economics of Joint and Several Liability” (1989) 65 *Land Econ* 305 at 316.

<sup>100</sup> See: Lewis A Kornhauser, “An Economic Analysis of the Choice Between Enterprise and Personal Liability for Accidents” (1982) 70 *Cal L Rev* 1345 at 1350; Marcel Boyer & Donatella Porrini, “Modelling the choice between regulation and liability in terms of social welfare” (2004) 37 *Can J Econ* 590 at 610; and Yolande Hiriart & David Martimort, “The benefits of extended liability” (2006) 37 *RAND J Econ* 562 at 563.

<sup>101</sup> See: *R v Finta*, [2004] 1 SCR 701.

<sup>102</sup> *Imperial Oil and Devon Estates*, *supra* note 63 at paras 93-94.

<sup>103</sup> *EPEA*, s 129(a).

<sup>104</sup> *EPEA*, s 107(1)(c).

<sup>105</sup> See: Environmental Law Centre, *supra* note 66 at 1.

<sup>106</sup> *EPEA*, ss 125-127.

EPO.<sup>107</sup> As a result, there has been great reluctance to use contaminated site designation as a tool for resolving environmental harm in Alberta. Alberta Environment has never issued a Part 5, Division 2 EPO.<sup>108</sup>

It is difficult to say whether Alberta Environment's reluctance to use the contaminated site designation has led to a significant difference in the results on the ground for the cleanup and remediation of brownfields from those provinces that have used their contaminated sites provisions to address the same problem. In provinces where contaminated site designation is used, the results of cleanup orders in those provinces may actually result in the same level of cleanup as a prevention, abatement or control order in Alberta, despite the greater enforcement powers under most contaminated sites provisions. Further investigation and study on the differential results, if any, of various approaches is necessary to put Alberta Environment's approach into its proper context. Perhaps more telling on this point has been Alberta Environment's overall reluctance to issue EPOs at all.<sup>109</sup> The tools are in *EPEA* to address brownfield problems, but it matters little if there is no political will, little public interest or pressure, and a general reluctance on the part of the regulator to use them.

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<sup>107</sup> *EPEA*, s 129.

<sup>108</sup> *McCull-Frontenac*, *supra* note 64 at para 127.

<sup>109</sup> There have been very few EPOs issued by Alberta Environment for substance releases. To be fair, Alberta Environment has issued EPOs for historic contamination in a handful of cases. In fact, Alberta Environment issued as many EPOs under *EPEA* and the *Water Act* (WA) in the last four months of 2010 (39) than in the previous 24 months combined (39), see: Alberta Environment, *Enforcement of the Environmental Protection and Enhancement Act and Water Act, 1 Jan 2008-31 Mar 2008* (Edmonton: Alberta Environment, 2010); *Enforcement of the Environmental Protection and Enhancement Act and Water Act, 1 Apr 2008-30 Jun 2008* (Edmonton: Alberta Environment, 2010); *Enforcement of the Environmental Protection and Enhancement Act and Water Act, 1 Jul 2008-30 Sep 2008* (Edmonton: Alberta Environment, 2010); *Enforcement of the Environmental Protection and Enhancement Act and Water Act, 1 Oct 2008-31 Dec 2008* (Edmonton: Alberta Environment, 2010); *Enforcement of the Environmental Protection and Enhancement Act and Water Act, 1 Jan 2009-31 Mar 2009* (Edmonton: Alberta Environment, 2010); *Enforcement of the Environmental Protection and Enhancement Act and Water Act, 1 Apr 2009-30 Jun 2009* (Edmonton: Alberta Environment, 2010); *Enforcement of the Environmental Protection and Enhancement Act and Water Act, 1 Jul 2009-30 Sep 2009* (Edmonton: Alberta Environment, 2010); *Enforcement of the Environmental Protection and Enhancement Act and Water Act, 1 Oct 2009-31 Dec 2009* (Edmonton: Alberta Environment, 2010); *Enforcement of the Environmental Protection and Enhancement Act and Water Act, 1 Jan 2010-31 Mar 2010* (Edmonton: Alberta Environment, 2010); *Enforcement of the Environmental Protection and Enhancement Act and Water Act, 1 Apr 2010-30 Jun 2010* (Edmonton: Alberta Environment, 2010); *Enforcement of the Environmental Protection and Enhancement Act and Water Act, 1 Jul 2010-30 Sep 2010* (Edmonton: Alberta Environment, 2010); and *Enforcement of the Environmental Protection and Enhancement Act and Water Act, 1 Oct 2010-31 Dec 2010* (Edmonton: Alberta Environment, 2011). From a review of the data, Alberta Environment issued EPOs for historic contamination to two gas stations and a former trucking business in 2010, an acetylene manufacturing facility in 2009, and a gas station in 2008.

It may be that Alberta Environment would rather use Part 6 of *EPEA* (conservation and reclamation section) than the contaminated sites provisions to address contaminated lands, but there is no proof that this is in fact the case here. Part 6 could certainly be used in the case of many sites that would be considered to be brownfields.<sup>110</sup> In comparison to Part 5 (substance release section), Part 6 (conservation and reclamation section) is potentially a far more extensive and powerful regulatory tool, even while constrained within certain prescribed limits. Under Part 6 an inspector may direct “any work” or “the suspension of any work” in order to conserve or reclaim contaminated land, and in the event the contamination has migrated from its source, an inspector may order the cleanup of any affected lands.<sup>111</sup> This permits the Director very broad authority to get contaminated lands cleaned up.

Part 6 of *EPEA* imposes on an “operator” a standing duty to conserve and reclaim the land, and to obtain a reclamation certificate from the Director when decommissioning facilities at designated commercial or industrial sites.<sup>112</sup> This is far more onerous than the voluntary remediation certificate process under Part 5 (substance release section) of *EPEA*.<sup>113</sup> In fact, the issuance of a remediation certificate under Part 5 (substance release section) of *EPEA* does not affect a person’s continuing obligation to obtain a reclamation certificate under Part 6 (conservation and reclamation section) of *EPEA*.<sup>114</sup> The terms and conditions of any conservation and reclamation measures under Part 6 of *EPEA* are often set out in the original approval or a code of practice, but they may also be found in an

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<sup>110</sup> For example, the *Activities Designation Regulation*, Alta Reg 276/2003 designates, along with other activities, the following activities that could be characterized as brownfields are also regulated activities under Part 6: asphalt paving plant, biotechnology products manufacturing plant, brine processing plant, brine storage pond, building products manufacturing plant, bulk petroleum storage facility, cement plant, chemical manufacturing plant, chemical storage facility, coal processing plant, coke or carbon manufacturing plant, compost facility, combustion unit, compressor and pumping station, concrete producing plant, container, distillery, electrical or electronic components plant, electroplating plant, explosives manufacturing plant, fertilizer manufacturing plant, fertilizer storage facility, foundry, glass manufacturing plant, infrastructure, insulation manufacturing plant, iron and steel mill, landfill, lead smelter, lime plant, malting plant, meat plant, meat manufacturing plant, milk products plant, mobile incinerator, oil refinery, oil seed processing plant, pesticide manufacturing plant, petrochemical manufacturing plant, pipeline, power plant, private utility, pulp manufacturing plant, quarry, rail car washing facility, rendering plant, sawmill plant, sewer, small incinerators, sour gas processing plant, sugar refinery, sulphur manufacturing or processing plant, sulphur storage facility, sweet gas processing plant, syngas plant, tanker truck washing facility, tannery, transmission line, vegetable plant, wastewater collection system, wastewater lagoon, wastewater treatment plant, waterworks system, wood processing plant, and wood treatment plant.

<sup>111</sup> *EPEA*, ss 140-141.

<sup>112</sup> *EPEA*, s 137(1).

<sup>113</sup> *EPEA*, s 117.

<sup>114</sup> *EPEA*, s 119.



EPO issued by an inspector.<sup>115</sup> In order to obtain a reclamation certificate, an operator must conserve and restore the land to an “equivalent land capability.” Under the *Conservation and Reclamation Regulation* that means:

that the ability of the land to support various land uses after conservation and reclamation is similar to the ability that existed prior to an activity being conducted on the land, but that the individual land uses will not necessarily be identical.<sup>116</sup>

This definition embeds the idea that successors of the original operator inherit a statutory duty for cleanup at the close of operations. It does not demand that lands be returned to a pristine condition, but rather to a state similar to that which existed before the regulated activity took place. In the case of a decommissioned chemical plant, for example, the land may have been previously used as a farm. Cleanup would have to meet the current guidelines for lands used for general agricultural purposes. On the other hand, if the land had previously been used as a warehouse or factory, cleanup would only have to meet the current guidelines for industrial lands.<sup>117</sup>

However, Part 6 of *EPEA* also has certain prescribed limits. First, it only applies to an “operator” engaged in a regulated activity. Under *EPEA* an “operator” includes the holder of an approval or registration for certain activities, any other person who carries on certain activities, a working interest participant in certain activities, the holder of a surface lease where certain activities are conducted, as well as a successor, assignee, executor, administrator, receiver, receiver-manager, or trustee or a principal or agent of any of the above.<sup>118</sup> However, Part 6 of *EPEA* does not impose any positive obligations on landowners or occupiers to report or cleanup. For the same reasons given for extending liability to landowners and occupiers under the substance release provisions, it may also be a wise policy to add these persons under Part 6, particularly in light of the general reluctance by Alberta Environment to use Part 5, Division 2 (the contaminated sites provisions).

Second, the obligation to cleanup a contaminated site under Part 6 (the conservation and reclamation section) is usually triggered on the decommissioning of a designated facility or plant. A reclamation inquiry by the Director only occurs after an application for a reclamation certificate has been received.<sup>119</sup> If an operator holds out at the end of

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<sup>115</sup> *EPEA*, s 137(2).

<sup>116</sup> *CRR*, *supra* note 72, ss 1(e) and 2.

<sup>117</sup> This presumes that there is no intention to change to a stricter land use such as from industrial to commercial or from industrial or commercial to residential. In that case, the cleanup would have to meet the numerical standards set out in the guidelines for the proposed new type of land use, given the higher risk to human health and the environment.

<sup>118</sup> *EPEA*, s 134(b).

<sup>119</sup> *CRR*, s 6.

the useful life of a facility or plant and never applies for a reclamation certificate, then the land may remain abandoned or underutilized indefinitely unless the problem comes to the Director's attention. If a brownfield comes to Alberta Environment's attention, an inspector may order an operator to perform any work or suspend any work if it is "necessary in order to conserve and reclaim" the land.<sup>120</sup> This is potentially a more extensive power than the EPO under Part 5, Division 1 (the substance release provisions) since it permits the Director to direct "the performance of any work" and expressly extends to conservation and reclamation efforts in relation to impacted neighbouring lands.<sup>121</sup>

It should be noted that Part 6 of *EPEA* requires that operators provide security and carry insurance in order to operate.<sup>122</sup> Where sufficient security or insurance was provided by persons engaged in past polluting activities, it would not be necessary to extend liability in order to recover the full costs of cleanup. In many cases, there would not be sufficient security or insurance in place to deal with the cleanup of brownfield sites. Many brownfields, as historic contamination, were contaminated before the security and insurance provisions of the Act came into force. Even where security and insurance were in place, they may not cover the full costs of cleanup. Some shortfall might still exist.<sup>123</sup> In those cases, the moral hazard problem would still remain if some parties are absolved of responsibility.<sup>124</sup> The moral hazard problem arises whenever a party does not bear full responsibility for its actions, so it acts with less care than it would if it were held fully responsible for its actions. It is similar to, and a corollary of, the free rider problem in joint and several liability, where those parties with the deeper pockets bear a greater risk than those who are more likely to be judgment proof. Thus, past due diligence efforts should matter, even if retroactive liability cannot change past mismanagement.<sup>125</sup> It should matter for no other reason than it encourages better gatekeeping behaviours by firms to reduce their future risk as a matter of deterrence.<sup>126</sup>

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<sup>120</sup> *EPEA*, s 140.

<sup>121</sup> *EPEA*, ss 140-141.

<sup>122</sup> *EPEA*, s 135.

<sup>123</sup> Steven Shavell, "On Moral Hazard and Insurance" (1979) 93 QJ Econ 541 at 555 [Shavell, "Moral Hazard"].

<sup>124</sup> *Ibid* at 541.

<sup>125</sup> Boyd & Kunreuther question the use of retroactive liability, see: James Boyd & Howard Kunreuther, "Retroactive Liability or the Public Purse?" (1997) 11 J Reg Econ 79 at 87-88.

<sup>126</sup> Kornhauser, *supra* note 100 at 1350.

### 2.2.1.3. Mechanisms for Allocating Responsibility

The CCME calls for a process that will facilitate the efficient cleanup of sites and the fair allocation of liability.<sup>127</sup> The process should include allocation guidelines and alternative dispute resolution procedures.<sup>128</sup> Liability for cleanup costs should be allocated between responsible parties based on a number of factors including relative contribution to the harm, due diligence and degree of fault, and any economic benefit to be gained from the cleanup of a brownfield.<sup>129</sup> Primary responsibility should still fall to those who caused the pollution or to those who authorized the activity that caused the pollution.<sup>130</sup> Any contribution made to cleanup costs from government-sponsored orphan share programs should be deducted from the net costs.<sup>131</sup> Finally, the CCME recommends that the process adopt four progressively directed steps: (a) the voluntary allocation of responsibility between parties; (b) a mediated settlement option through the intervention of an independent person or body; (c) a directed or arbitrated option through the intervention of an independent person or body; and (d) a final decision by the regulator under joint and several liability.<sup>132</sup>

Alberta Environment's approach to contaminated sites has come under some scrutiny by some commentators, partially because the allocation guidelines are only found in Part 5, Division 2 (the contaminated sites provisions) of *EPEA*.<sup>133</sup> There are no similar guidelines under Part 5, Division 1 (the substance release provisions) or Part 6 (the conservation and reclamation sections) of *EPEA*. The guidelines permit the Director to consider the factors (i.e., relative contribution, due diligence, fault, and economic benefit) set out by the CCME, as well as the catch all of "any other criteria the Director considers to be relevant."<sup>134</sup> The contribution of any orphan share program is also to be considered.<sup>135</sup>

However, because they only appear in the contaminated sites provisions in Alberta, the guidelines are unavailable to a responsible person unless the Director has first designated a site as a contaminated site. Since the Director may name any one or more

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<sup>127</sup> CCME, *Recommended Principles*, *supra* note 2 at 6-7.

<sup>128</sup> *Ibid.*

<sup>129</sup> *Ibid.* at 8-9. See also: BC Advisory Panel, *Final Report*, *supra* note 96 at 108-109.

<sup>130</sup> BC Advisory Panel, *Final Report*, *ibid.*

<sup>131</sup> *Ibid.*

<sup>132</sup> CCME, *Recommended Principles*, *supra* note 2 at 9-10.

<sup>133</sup> *EPEA*, s 129(2)(b).

<sup>134</sup> *EPEA*, s 129(2). Similar factors are found in the legislation of British Columbia and Manitoba: see *EMA*, s 49(3) and *Contaminated Sites Remediation Act*, CCSM, c C205, s 21(b) [CSRA].

<sup>135</sup> *EPEA*, ss 124 & 129(3).

persons responsible in an EPO, without the allocation guidelines or a right of contribution, a person responsible may wind up solely liable for all the cleanup costs and remediation measures connected to a brownfield site.<sup>136</sup>

This can produce considerable unfairness in the process for several reasons. First, it leads to an unfair procedure. According to the EAB in *Imperial Oil and Devon Estates*, “administrative fairness obliges the Director to also name other clearly responsible parties in an EPO so that the cleanup burden might be shared. If two parties caused or contributed to the presence of substances at a site, it would be unfair if responsibility for cleanup was attached to one party while the other party remained free of obligation.”<sup>137</sup> While the Director retains the discretion to name any one or more persons responsible in an EPO under the contaminated sites provisions, procedural fairness dictates that the Director attempt to add all responsible parties to an EPO or provide reasons for failing to do so.<sup>138</sup> Procedural fairness must promote participatory goals such as the guarantee of fair and equal participation in the process and must also be seen as a legitimate exercise of administrative authority.<sup>139</sup> Otherwise, it seems somewhat misleading to imply to stakeholders and the public that Alberta Environment considers such factors when dealing with contaminated sites, when Alberta Environment refuses to designate sites as contaminated sites.<sup>140</sup> When allocating responsibility between parties, every effort should be made to ensure fairness.<sup>141</sup>

Second, the pursuit of less than all potentially responsible persons, subject to a reasonable *de minimus* category for minor contributors to the contamination, amounts to joint and several liability and leads to the free rider problem. Some commentators argue that joint and several liability should only be used when the harm is indivisible and only after other efforts to allocate liability fairly have failed.<sup>142</sup> According to Tom Tietenberg,

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<sup>136</sup> *Ibid* at para 26; and *Imperial Oil and Devon Estates*, *supra* note 63 at paras 193-194.

<sup>137</sup> *Ibid*.

<sup>138</sup> The *Guidelines for the Designation of Contaminated Sites* suggest that Alberta Environment will contact each potentially responsible person in an effort to ensure that “all persons who may have had any responsibility in causing or contributing to the contamination are included” in the process, see Alberta Environment, *Guidelines for the Designation of Contaminated Sites*, *supra* note 69 at 3-4.

<sup>139</sup> Lawrence Solum argues that “[a]ccuracy, cost, and participation” are play a key role in ensuring procedures are fair, but L’Heureux-Dubé J also adds a legitimacy component, see: Lawrence B Solum, “Procedural Justice” (2004) 78 S Cal L Rev 181 at 305; and L’Heureux-Dubé J in *Knight v Indian Head School Division No 19*, [1990] 1 SCR 653 at 675 [*Knight*].

<sup>140</sup> The *Guidelines for the Designation of Contaminated Sites* states that “Alberta Environment, on its own initiative, or a proponent may request the use of the contaminated sites provisions” and that “[t]hroughout the remediation and cost allocation process, various factors will be considered”, see: Alberta Environment, *Guidelines for the Designation of Contaminated Sites*, *supra* note 69 at 1, 12-13.

<sup>141</sup> *Imperial Oil and Devon Estates*, *supra* note 63 at para 197.

<sup>142</sup> See: Tietenberg, *supra* note 99 at 306; and CCME, *Recommended Principles*, *supra* note 2 at 9.

joint and several liability creates unfairness because it does not adequately address the free rider problem.<sup>143</sup> The problem arises whenever some parties shoulder less than their fair share of the costs while other parties, with deeper pockets, pay more. Such strategies lead to “wealth targeting” as regulators, who are conscious of administrative costs, attempt to recoup cleanup costs from the least number of potentially responsible parties.<sup>144</sup> It may also lead to the moral hazard problem identified by Steven Shavell, where parties who may be more judgment proof than others (the deeper pocket parties) exercise less due diligence and care.<sup>145</sup> According to Alberta Environment, joint and several liability should only be used to pay for orphan shares under agreements, to deal with shell companies when there is uncertainty or limited information on their actual relationships, and to deal with situations where there is not enough information to fairly allocate liability.<sup>146</sup>

To avoid unfairness, the EAB in *McColl-Frontenac* strongly urged the Director not to lose sight of the contaminated sites designation process whenever addressing contamination issues.<sup>147</sup> An unwillingness to use those provisions may render them “meaningless” and would “frustrate” the legislative intent behind them.<sup>148</sup>

Where other provinces have adopted allocation guidelines within their legislation, they have made them far more accessible to those responsible for cleanup and remediation. British Columbia, for example, frames their allocation guidelines squarely within their allocation panel process.<sup>149</sup> Any person responsible may request the appointment of an allocation panel.<sup>150</sup> The British Columbia Government deems a site as contaminated upon the striking of an allocation panel, even if the site would not otherwise meet the specific requirements for a contaminated site designation.<sup>151</sup> While the director may still refuse to appoint an allocation panel, in comparison to Alberta, responsible persons in British Columbia have at least one more option to fall under the contaminated sites provisions. Manitoba, on the other hand, takes a broader approach, making their guidelines available whenever the director approves an apportionment

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<sup>143</sup> Tietenberg, *ibid* at 306.

<sup>144</sup> *Ibid* at 316-317.

<sup>145</sup> Shavell, “Moral Hazard”, *supra* note 123 at 541.

<sup>146</sup> Alberta Environment, *Guidelines for the Designation of Contaminated Sites*, *supra* note 69 at 17.

<sup>147</sup> *Imperial Oil and Devon Estates*, *supra* note 63 at paras 122-133.

<sup>148</sup> *Ibid* at para 127.

<sup>149</sup> *EMA*, s 49 and *CSRA*, Part 5.

<sup>150</sup> *EMA*, s 49(2).

<sup>151</sup> *EMA*, s 49(5).

agreement or a mediator negotiates such an agreement, or whenever a director, mediator or the commission apportions responsibility for remediation costs between parties.<sup>152</sup>

To reduce the number of parties involved in the allocation process, and to reduce the transaction costs associated with a multiplicity of parties, British Columbia and Manitoba exempt *de minimus* or minor contributors.<sup>153</sup> There is no *de minimus* or minor contributor exemption under *EPEA*.

To the extent allocation guidelines and procedures reduce transaction costs, the regulatory system can more easily get on with the business of cleanup and remediation. However, a number of factors raise transaction costs connected with the process. Regulators often complain that the process for orders and determinations takes up a considerable amount of time, diverts staff from other important matters, and impedes staff from responding to environmental concerns in a timely manner.<sup>154</sup> Some stakeholders call for increased procedural fairness in the process and question the wisdom of permitting regulators to make determinations on technical matters outside their expertise.<sup>155</sup> Procedural fairness calls for accurate results, lower transaction costs, and fair and reasonable participation in the process,<sup>156</sup> but also requires that decisions are made in accordance with the rule of law.<sup>157</sup> Another concern frequently expressed is the length and cost of the environmental hearing process, particularly when they lead to further appeals and reconsideration of the same evidence and arguments as the matter moves up the adjudicative chain.<sup>158</sup> It is for these reasons that the B.C. Advisory Panel on Contaminated Sites (B.C. Advisory Panel) recommends a single process that would include mediation within an Alternative Dispute Resolution (ADR) framework and adjudication through a reformed Environmental Appeal Board.<sup>159</sup> Such an approach would minimize the prolonged and costly litigation that often prevails in brownfield disputes.

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<sup>152</sup> *CSRA*, s 21.

<sup>153</sup> *EMA*, s 50 & *CSRA*, s 9(3).

<sup>154</sup> BC Advisory Panel, *Final Report*, *supra* note 96 at 113.

<sup>155</sup> *Ibid.*

<sup>156</sup> Solum, *supra* note 139 at 305.

<sup>157</sup> *Knight*, *supra* note 139 at 675.

<sup>158</sup> BC Advisory Panel, *Final Report*, *supra* note 96 at 113-114.

<sup>159</sup> *Ibid* at 117-122.

#### 2.2.1.4. *The Termination of Future Liability*

The termination of, or sign-off from future regulatory liability for a brownfield, even after a site has been cleaned up or remediated, remains one of the most significant reasons many brownfields remain abandoned or underutilized.<sup>160</sup> Regulatory sign-offs provide those involved in a cleanup with some confidence or comfort that they will not be found responsible in the future, if regulatory standards change or more contamination is later discovered.<sup>161</sup> To encourage brownfield redevelopment, the B.C. Advisory Panel indicates that liability must be “finite and certain.”<sup>162</sup> The NRTEE encourages the adoption of rules that provide “clear and unequivocal” termination of liability after regulatory approval, except for emergencies, fraud, or when the landowner or its successors fail to maintain any conditions attached to the land.<sup>163</sup> Termination of liability permits parties to more accurately assess the risks associated with a brownfield and to determine the cost of compliance.<sup>164</sup> This may call for a three part strategy to terminate, or at least reduce the risk of, future liability: voluntary cleanup agreements, reclamation certificates, and orphan share funds.

*Voluntary Cleanup Agreements:* Several Canadian jurisdictions provide for the use of Voluntary Cleanup Agreements (VCAs).<sup>165</sup> These agreements allow for the voluntary cleanup of a brownfield by a person responsible in exchange for some form of regulatory closure from future liability.<sup>166</sup> They evolved from similar developments in the U.S., where states began offering voluntary cleanup programs as a cheaper, faster, and more effective alternative to that offered under the federal *CERCLA*.<sup>167</sup> VCAs permit private parties to initiate cleanup and to work cooperatively with regulators, thus avoiding the high costs and lengthy delays often associated with regulatory liability schemes.<sup>168</sup> As

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<sup>160</sup> BC Advisory Panel, *Final Report*, *supra* note 96 at 122.

<sup>161</sup> See: RCI Consulting, *supra* note 9 at 11.

<sup>162</sup> BC Advisory Panel, *Final Report*, *supra* note 96 at 124. The B.C. Advisory Panel call for four tools: (1) Records of Site Condition and No Further Action Letters; (2) prospective purchaser agreements; (3) private agreements for allocating liability; and (4) limitation period for civil liability.

<sup>163</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 26.

<sup>164</sup> *Ibid.*

<sup>165</sup> British Columbia, Alberta, Manitoba, Ontario and Nova Scotia provide for voluntary remedial agreements, see *EMA*, s 51; *EPEA*, s 128; *CSRA*, s 22; Ontario *Environmental Protection Act*, s 182.1(9); and Nova Scotia *Environment Act*, 1994-96, c 1, ss 70 & 89.

<sup>166</sup> Glass Geltman, *Recycling Land*, *supra* note 15 at 358.

<sup>167</sup> See: NRTEE, *Cleaning Up the Past*, *supra* note 1 at 26; Glass Geltman, *Recycling Land*, *ibid.*; and William Buzbee, “Remembering Repose: Voluntary Contamination Cleanup Approvals, Incentives, and the Costs of Interminable Liability” (1995) 80 Minn L Rev 35 at 107-110.

such, they are often seen as an important contribution to an effective brownfield strategy.<sup>169</sup>

In Alberta, the Director has the discretion to approve or reject an application for a VCA.<sup>170</sup> No such agreement is valid without the Director's approval.<sup>171</sup> The Director typically grants three months for the parties to negotiate the terms of any VCA.<sup>172</sup> If no agreement is reached, Alberta Environment has indicated that the Director will simply issue an EPO directing remediation on any terms it deems fit and allocate the costs accordingly.

It is difficult to assess the current practice in Alberta since VCAs fall under the contaminated sites provisions and are therefore infrequently evoked, but there is nothing preventing the Director and those who might be held liable for cleanup costs and remediation from entering voluntary arrangements as a practical matter.<sup>173</sup> I was unable to find any empirical data on the use of VCAs in other provinces. Therefore, their effectiveness remains largely anecdotal.

*Remediation Certificates and Comfort Letters:* Remediation certificates and comfort letters are issued by regulators once remediation has been completed. They confirm that no further action is required on the part of a person responsible.<sup>174</sup> Their purpose is to provide some regulatory assurance to those involved that liability has come to an end. If new regulatory standards are introduced, these will not be imposed retrospectively on those who have regulatory assurance under a remediation certificate or comfort letter.

Because of the strong assurance they provide to those who come under them, remediation certificates and comfort letters are preferred over the indirect assurance of a Records of Site Condition (RSC) certificate.<sup>175</sup> RSCs provide a public record of the state

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<sup>168</sup> Todd S Davis, "Defining the Brownfield Problem" in Todd S Davis, ed, *Brownfields: A Comprehensive Guide to Redeveloping Contaminated Property*, 2d ed (Chicago: American Bar Association, 2002) 3 at 13.

<sup>169</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 26-27. The CCME does not recommend the complete termination of prospective liability, even though it recognizes that limited certificates of compliance would continue to perpetuate the cloud of uncertainty over brownfields, see: CCME, *Recommended Principles*, *supra* note 2 at 10-11.

<sup>170</sup> EPEA, s 128(1).

<sup>171</sup> EPEA, s 128(2).

<sup>172</sup> Alberta Environment, *Guidelines for the Designation of Contaminated Sites*, *supra* note 69 at 13-14.

<sup>173</sup> Environmental Law Centre, *supra* note 66 at 8.

<sup>174</sup> BC Advisory Panel, *Final Report*, *supra* note 96 at 125.

<sup>175</sup> RCI Consulting, *supra* note 9 at 15.



of the land after cleanup as certified by the statement of a “qualified person.”<sup>176</sup> That person need not be a government official, and in most cases is a private engineer hired by the developer to prepare the remedial action plan. The government merely approves the remedial plan and proposed redevelopment project based on the engineer’s environmental report. Thus, a RSC is no assurance by the government.<sup>177</sup>

In Alberta, once a site is remediated to the satisfaction of the Director, the party who conducted a Tier 1 or Tier 2 cleanup may apply to the Director for a *remediation certificate*.<sup>178</sup> As remediation certificates under *EPEA* are voluntary, the Director may issue or refuse to issue a remediation certificate.<sup>179</sup> A remediation certificate grants the holder a limited immunity from further liability in respect of the same release of the same substance.<sup>180</sup> However, a remediation certificate can become outdated or cancelled when there is a change in the intended use of the land to a more stringent use, such as from commercial to residential, or where an audit or substantiated complaint indicates non-compliance with the original requirements imposed at the time the certificate was issued.<sup>181</sup>

This is in keeping with the recommendations of the NRTEE, that recommends the termination of regulatory liability upon completion of approved remediation, subject to regulatory re-openers for environmental emergencies, the failure to maintain required risk management steps, or misrepresentation or fraud.<sup>182</sup> Termination of regulatory liability in conjunction with an insurance fund would provide greater certainty to redevelopment and encourage the return of private investment.<sup>183</sup> For the most part, cleanups seem to be

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<sup>176</sup> Ontario, *Records of Site Condition*, *supra* note 81 at 2-3. A qualified person is limited to science, engineering or applied technology graduates with 5 to 8 years experience in the conduct of site assessments and risk assessments, see *Records of Site Condition – Part XV.1 of the Act*, O Reg 153/04, ss 6(1).

<sup>177</sup> According to RCI Consulting, only Ontario, Prince Edward Island and Newfoundland do not provide some form of regulatory sign-off in the form of a certificate of compliance, see RCI Consulting, *supra* note 9 at 18.

<sup>178</sup> *EPEA*, s 117.

<sup>179</sup> *Remediation Certificate Regulation*, Alta Reg 154/2009, s 4.

<sup>180</sup> *EPEA*, s 118.

<sup>181</sup> Alberta Environment, *Guide to Remediation Certificates for Petroleum Storage Tank Sites* (Edmonton: Alberta Environment, 2009) at 17.

<sup>182</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 26-27. See also BC Advisory Panel, *Final Report*, *supra* note 96 at 126.

<sup>183</sup> NRTEE, *Cleaning Up the Past*, *ibid* at 26.

effective and concerns about inadequate cleanup are probably unfounded. Based on empirical data the rate of re-openers is very low, slightly more than 0.1%.<sup>184</sup>

Where a site has been reclaimed under Part 6 (the conservation and reclamation section) of *EPEA*, an inspector may issue a reclamation certificate subject to specific terms and conditions.<sup>185</sup> However, a reclamation certificate, unlike a remediation certificate, is subject to a wider range of regulatory re-openers. The Director or an inspector may amend, cancel or correct a reclamation certificate, or issue a new order where further work is found to be necessary and the work relates to matters that were not previously apparent at the time the reclamation certificate was issued.<sup>186</sup>

*Orphan Share Funds:* Most commentators call for the use of orphan share funds. The NRTEE has indicated orphan share funds should be used only to insure against the risk of post-liability contamination being discovered.<sup>187</sup> The B.C. Advisory Panel calls for a broader government-funded program that would include Crown land remediation, development grants, orphan shares, and LUSTs, and would also fund the administrative costs of a regulatory agency with the oversight of the whole program.<sup>188</sup> The advantages of orphan share funds are that they address imperfections in the insurance market, help terminate or close future liability, and convert future risk into a known cost through an insurance premium paid.<sup>189</sup> As a question of fairness, an orphan share fund recognizes that retrospective liability is nothing more than a backward-looking “cash grab.”<sup>190</sup> According to Don Fullerton and Seng-Su Tsang, it is fairer if the cleanup of past contamination is funded through some form of government program based on a pollution tax or drawn from general revenues, since the ultimate beneficiary of prior contamination was the consumer.<sup>191</sup>

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<sup>184</sup> Robert A Simons, John Pendergrass & Kimberly Winson-Geideman, “Quantifying Long-term Environmental Regulatory Risk for Brownfields: Are *Reopeners* Really an Issue?” (2003) *J Envtl Planning & Mgmt* 257 at 266.

<sup>185</sup> *EPEA*, s 138(5).

<sup>186</sup> *EPEA*, ss 139 & 142.

<sup>187</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 28.

<sup>188</sup> BC Advisory Panel, *Final Report*, *supra* note 96 at 139-146. The far-reaching structure of the BC Advisory Panel’s proposed funding program looks a lot like *CERCLA*. It would be funded through general revenues, and a variety of taxes, fees and levies on chemicals and chemical industries.

<sup>189</sup> *Ibid.*

<sup>190</sup> Steven Globerman & Richard Schwindt, “Economics of Retroactive Liability for Contaminated Sites” (1995) 29 *UBC L Rev* 27 at 37.

<sup>191</sup> Don Fullerton & Seng-Su Tsang, *Environmental Costs Paid by the Polluter or Beneficiary? The Case of CERCLA and Superfund*, Working Paper No 4418 (Cambridge, MA: National Bureau of Economic

## 2.2.2. The Impact of Other Provincial Statutes

In the preceding section, I discussed key elements of *EPEA* as the key provincial statute governing brownfield cleanup and redevelopment. This next section will consider two primary areas of overlapping provincial regulation to *EPEA*: water quality regulation, and health and safety regulation. This section explores how other provincial laws interact with *EPEA* to regulate brownfield cleanup and redevelopment. It points out that in some ways the presence of other regulatory tools complements the goals of *EPEA*, but in other ways it complicates the regulatory process for brownfield cleanup and redevelopment as a whole.

### 2.2.2.1. Water Quality Regulation

Typically when one thinks of brownfields, one thinks of soil and subsoil contamination at a former commercial or industrial facility such as a decommissioned oil refinery, gas station, manufacturing centre, or chemical processing plant. However, where there is soil and subsoil contamination, there is often groundwater contamination as well. Soils and subsoils tend to be porous and contaminants, if left for significant periods of time, will percolate into water pathways and pollute the aquifers below.

According to Alberta Environment's report *Water for Life*, the state and quality of Alberta's water resources are an important value, defined by three identified goals: that drinking water is safe, that aquatic ecosystems are maintained and protected, and that water is managed effectively to support sustainable economic development.<sup>192</sup> The overall policy initiative in Alberta consists of a number of institutional, regulatory, expenditure, and economic instruments, including strategic frameworks, laws, education and awareness programs, research and development initiatives, and financial incentives.<sup>193</sup> Generally, the management and control of Alberta's water resources are set out in the *Water Act (WA)*<sup>194</sup> although some ancillary matters still fall under *EPEA* and other related regulations.<sup>195</sup>

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Research, 1993) at 25-26 and Don Fullerton, "A Framework to Compare Environmental Policies" (2001) 68 *So Econ J* 224 at 243.

<sup>192</sup> Alberta Environment, *Water for Life: Alberta's Strategy for Sustainability* (Edmonton: Alberta Environment, 2003) at 7.

<sup>193</sup> Brian Osborne, *Alberta Provincial Case Study: Analysis of Water Strategies for the Prairie Watershed Region: Working Draft for Comment* (Winnipeg: Panterra Management Ltd, 2005) at 16-17.

<sup>194</sup> RSA 2000, c W-3 [WA].

<sup>195</sup> For example, section 148 of *EPEA* prohibits the release of any substance into a waterworks system that may make the potable water supply to be unfit for its intended use or in a level contrary to an approval, code of practice or regulation.

The primary purpose of the WA is “to support and promote the conservation and management of water, including the wise allocation and use of water” while recognizing a number of important environmental goals, including, among others, conservation, sustainability and environmental protection; economic development; integrated approaches and adaptive management strategies; public planning and decision-making; interjurisdictional cooperation; and comprehensive and responsive action.<sup>196</sup> In addition to water diversions, works, and transfers, dams, canals, and water wells, the WA also applies to any “activity” that may affect the aquatic environment.<sup>197</sup> Equally, under the *Canada Water Act (CWA)*, no person shall deposit or permit to be deposited wastes into water, which include groundwater.<sup>198</sup> As such, water statutes clearly apply to the risk of groundwater contamination at brownfield sites.

Groundwater contamination is especially pernicious because the natural movement of groundwater through the subsoil or an aquifer can spread contaminants far from their original source.<sup>199</sup> There are two main sources of groundwater contamination: point source and non-point source. Point sources include landfills, underground storage tanks, septic tanks and industrial spills.<sup>200</sup> Non-point sources include agricultural fertilizers, pesticide use, and contaminants from rain, snow and dry atmospheric fallout.<sup>201</sup> The levels of contaminants permissible in water sources, and the means for assessing the levels, are set out in provincial guidelines. For example, the *Water Quality Based Effluent Limits Procedure Manual*, that adopts techniques drawn from the U.S. Environmental Protection Agency, describes instream guidelines for testing the quality of water from industrial and municipal discharges.<sup>202</sup> Similarly, surface water quality and groundwater quality guidelines are set out in the *Surface Water Quality Guidelines for Use in Alberta* and *Groundwater Evaluation Guidelines*, respectively.<sup>203</sup>

At least when it comes to water quality there seems to be considerable harmonization between environmental protection and water legislation. Cleanup standards are dealt with

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<sup>196</sup> WA, s 2.

<sup>197</sup> WA, s 1(1)(b)(D).

<sup>198</sup> *Canada Water Act*, RSC 1985, c C-11, s 9 [CWA].

<sup>199</sup> CGWA, *supra* note 4 at 2-6.

<sup>200</sup> *Ibid* at 4.

<sup>201</sup> *Ibid*.

<sup>202</sup> Alberta Environmental Protection, *Water Quality Based Effluent Limits Procedure Manual* (Edmonton: Alberta Environmental Protection, 1995).

<sup>203</sup> See Alberta Environment, *Surface Water Quality Guidelines for Use in Alberta* (Edmonton: Alberta Environment, 1999) and Alberta Environment, *Groundwater Evaluation Guidelines* (Edmonton: Alberta Environment, 2003).

through the *Alberta Tier 1 and Tier 2 Soil and Groundwater Remediation Guidelines*.<sup>204</sup> These guidelines set out province-wide standards for the remediation of brownfield sites.<sup>205</sup> They are administered by Alberta Environment and classify remediation standards based on the level of cleanup required, from generic or background standards for cleanup (Tier 1),<sup>206</sup> through site-specific cleanup, where some contaminants will remain *in situ* (Tier 2),<sup>207</sup> and finally to site-specific risk assessment requiring ongoing risk management of *in situ* contamination (Exposure Control).<sup>208</sup>

When it comes to brownfields, the *WA* reaches further than *EPEA*. First, the *WA* includes landowners as persons responsible for an activity.<sup>209</sup> Under the *WA* the Director may issue a water management order directing that a person, including the current or former landowner, report, maintain, stop, prevent, and restore or reclaim the land,<sup>210</sup> where there is an adverse effect to the aquatic environment, human health, property or public safety.<sup>211</sup> This is more consistent with the approach adopted in other provinces. Second, the regulatory powers of the Director to investigate are broader. Under the *WA* an investigator, while performing its duties, may enter any place to investigate<sup>212</sup> and any place, other than a dwelling place, to inspect.<sup>213</sup> This avoids the limitations of self-reporting inherent in Part 5, Division 1 (the substance release provisions) of *EPEA*. Third, a person responsible has legislative access to mediation where there are two or more parties involved in the dispute.<sup>214</sup> While the Minister still retains the discretion to accept or reject the request, this approach is more consistent with that adopted in British Columbia and Manitoba for allocating liability.<sup>215</sup> It is also more consistent with the ADR model recommended by the CCME.<sup>216</sup> Thus, it would seem that *EPEA*, to be more

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<sup>204</sup> See Alberta Environment, *Alberta Tier 1*, *supra* note 58 and Alberta Environment, *Alberta Tier 2 Soil and Groundwater Remediation Guidelines* (Edmonton: Alberta Environment, 2007) [Alberta Environment, *Alberta Tier 2*].

<sup>205</sup> *Ibid.*

<sup>206</sup> Alberta Environment, *Alberta Tier 1*, *ibid* at 15-16.

<sup>207</sup> Alberta Environment, *Alberta Tier 2*, *supra* note 204 at 24.

<sup>208</sup> *Ibid* at 36.

<sup>209</sup> *Water (Ministerial) Regulation*, Alta Reg 205/98, s 1(5).

<sup>210</sup> *WA*, s 99.

<sup>211</sup> *WA*, s 97(1)(c).

<sup>212</sup> *WA*, s 128.

<sup>213</sup> *WA*, s 119.

<sup>214</sup> *WA*, ss 93-94.

<sup>215</sup> It will be recalled that both British Columbia and Manitoba have statutory allocation to avoid lengthy and costly disputes. See: *EMA*, s 49(2) and *CSRA*, s 21.

<sup>216</sup> CCME, *Recommended Principles*, *supra* note 2 at 6-7.

consistent with the WA, should be extended in at least the above-mentioned three ways.

### 2.2.2.2. *Health and Safety Regulation: A Comment*

According to the CCME, LUSTs represent about 60% of all contaminated sites in Canada.<sup>217</sup> To address this problem the CCME developed in 2001 the *Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil* which set out generic cleanup criteria for site-specific risk-based remediation for LUSTs.<sup>218</sup> For Renée Craig, LUSTs are a significant enough problem to warrant the creation of a government fund to help finance the cost of cleaning them up.<sup>219</sup> In response, a number of provinces adopted guidelines and programs for the decommissioning and removal of LUSTs. Alberta, for example, introduced a tank-site remediation program to help municipalities and the owners of small retail gas stations pay for the costs of removing underground storage tanks.<sup>220</sup> However, due to funding constraints, the program ended on 31 March 2009.<sup>221</sup> While the cleanup of toxic soil and subsoil around a LUST is a matter falling under *EPEA* or the *WA* where the contamination has adversely affected groundwater or an aquifer, the actual decommissioning of a LUST falls under the *Safety Codes Act (SCA)*.<sup>222</sup>

Under the *SCA*, an owner of a LUST is responsible for ensuring that the regulatory guidelines set out for its safe decommissioning and removal are followed.<sup>223</sup> Responsibility rests with the owner of the LUST to comply with the guidelines.<sup>224</sup> Petroleum storage tanks are dealt with under Part 4 of the *Alberta Fire Code 2006 (Code)* that provides any owner who wishes to remove a storage tank system must obtain a permit from the municipality or the Petroleum Tank Management Association of Alberta

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<sup>217</sup> CCME, *Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil* (Winnipeg: CCME, 2001) at 2.

<sup>218</sup> *Ibid.*

<sup>219</sup> Craig, *supra* note 62 at C-5.

<sup>220</sup> Alberta Municipal Affairs, News Release, “Province provides \$50 million for tank site remediation” (25 August 2006). This program was expected to resolve 300 sites, leaving an additional 600 sites unresolved. A previous program offered in 2000 and funded with \$60 million, helped cleanup 930 similar sites throughout the province.

<sup>221</sup> Alberta Municipal Affairs, “Tank Site Remediation Program”, online: Alberta Municipal Affairs <[http://municipalaffairs.gov.ab.ca/am\\_tank\\_site\\_remediation\\_program.cfm](http://municipalaffairs.gov.ab.ca/am_tank_site_remediation_program.cfm)> [Alberta Municipal Affairs, “Tank Site Remediation Program”].

<sup>222</sup> RSA 2000, c S-1 [SCA].

<sup>223</sup> The duties of an owner are set out in the *SCA*, s 5.

<sup>224</sup> Ownership under the *SCA* relates to a thing, process or activity governed by the Act, which makes the Act somewhat self-referential, see: *SCA*, ss 2 & 5.

and must also inform Alberta Environment.<sup>225</sup> Where a LUST is removed a remediation certificate may be requested, and if granted by the Director, there is regulatory liability closure if Alberta Environment's guidelines are amended or updated.<sup>226</sup> Even if a storage tank is abandoned and not removed, the owner must maintain a quality management system subject to review by a safety codes officer.<sup>227</sup>

There are important differences between the procedures under environmental protection legislation and that under the *SCA*. First, the powers of a safety codes officer are much narrower in scope than those of the Director under *EPEA* when it comes to dealing with the decommissioning and removal of a LUST. A safety codes officer may issue a stop order or direct that a person do something to remedy a violation of the Code.<sup>228</sup> In comparison, a Part 5, Division 1 (the substance release provisions) EPO can order that a responsible person take prevention, abatement and control measures, which also includes steps to remediate and restore the site.<sup>229</sup> It is unlikely that a safety codes officer would be able to order that a person take environmental measures, unless they relate to the actual process of decommissioning and removing the LUST. This makes sense since the *SCA* is more interested in "how" a LUST is decommissioned or removed than in "what" a LUST does, or has done, to the environment.<sup>230</sup> Second, the adjudication process under the *SCA* may, where the safety codes officer is not an employee of a municipality or local authority, lead up to a non-governmental agency, the Petroleum Tank Management Association of Alberta, rather than to a governmental authority. Orders of a safety codes officer may be appealed to an Administrator who has the authority to order, revoke or vary the prior order.<sup>231</sup> Further appeal may be taken up with the Safety Codes Council, an independent corporation with its own governance structure and bylaws.<sup>232</sup>

In the case of LUSTs, the *SCA* adds a new layer of responsible persons to the brownfield problem. The substance release provisions of *EPEA* focus on those who own or who have the charge, management or control of the petroleum products leaking from a

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<sup>225</sup> *Permit Regulation*, Alta Reg 204/2007, s 10 and Alberta Municipal Affairs, Fire Code Bulletin, STANDATA, FCB-09-01, "Permits for Storage Tanks: Installation, Alteration and Removal" (February 2009) at 1 [Alberta Municipal Affairs, "Permits for Storage Tanks"].

<sup>226</sup> Alberta Environment, *A Guide to Remediation Certificates for Petroleum Storage Tank Sites* (Edmonton: Alberta Environment, 2009) at 1, 8-10.

<sup>227</sup> *SCA*, s 39.

<sup>228</sup> *SCA*, s 49(3).

<sup>229</sup> *EPEA*, ss 112-113.

<sup>230</sup> This inference can be drawn from the emphasis on fire protection and the application of the Act to design, manufacture, construction, installation, operation and maintenance, see *SCA*, s 2(1).

<sup>231</sup> *SCA*, s 49(6).

<sup>232</sup> *SCA*, ss 16-25 & 50.

storage tank.<sup>233</sup> The contaminated sites provisions of *EPEA* and the *WA* add the landowner to the pool of responsible persons.<sup>234</sup> What the *SCA* does is add the owner of the storage tank to the pool as well.<sup>235</sup> This can increase the number of parties involved in a dispute. In the case of a former gas station, for example, the operator of the gas station may not be the same person as the owner of the land. There may be a franchise agreement permitting the operator to run the gas station on behalf of a petroleum company. The land may be owned by the company or leased from a third party. Depending on the contract the fuel in the storage tanks may be owned by the operator or a third party supplier. To complicate matters, the gas station site may be decommissioned and the land sold or leased to a third party that was not engaged in the retail sale of gas from the station.<sup>236</sup> Over a number of years of operations, the pool of parties who may have incurred some responsibility for the contamination at the gas station can multiply significantly. In the case of the decommissioning or removal of a LUST, there is no centralized process for allocating liability between the parties or for determining which of the two administrative procedures (that under Alberta Environment or that under the Safety Codes Council) take priority. This uncertainty may lead to more conflict and higher transaction costs.

To further complicate matters, the *Nuisance and General Sanitation Regulation* holds a person responsible for a nuisance when they create a situation that may be injurious or dangerous to public health or that might hinder the suppression of disease.<sup>237</sup> If past contamination adversely affects human health, safety and the environment, it would also seem likely to be injurious or dangerous to public health. By virtue of the *Public Health Act (PHA)* nuisances under the Act take priority over all other provincial statutes including *EPEA*.<sup>238</sup> This means that the orders of an executive officer take priority over those of Alberta Environment. This does not mean that a person responsible can ignore the order of the Director. It does mean that when there is conflict between an order of an executive officer and an EPO, the person responsible is obligated to follow the order of the executive officer.

The *PHA* authorizes an executive officer to direct an owner to carry out specified work or to remove the source of the nuisance, so there is overlapping jurisdiction between the *PHA*, *EPEA*, the *SCA*, and the *WA*.<sup>239</sup> To avoid statutory conflict may

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<sup>233</sup> *EPEA*, ss 1(tt)(i)-(ii).

<sup>234</sup> *EPEA*, s 107(1)(c) and *Water (Ministerial) Regulation*, s 1(5).

<sup>235</sup> *SCA*, s 1(1)(v).

<sup>236</sup> These are some of the facts of *McColl-Frontenac*, see: *McColl-Frontenac*, *supra* note 64 at paras 8-17.

<sup>237</sup> *Nuisance and General Sanitation Regulation*, Alta Reg 243/2003, s 2.

<sup>238</sup> *Public Health Act*, RSA 2000, c P-37, s 75 [*PHA*].

<sup>239</sup> *PHA*, s 62(4).



require coordination between the executive officer, Alberta Environment and a safety codes officer as well as some cooperation between all of the parties. The *PHA* holds the owner or occupier of land responsible for complying with the terms of any order.<sup>240</sup> Yet, a Part 5, Division 1 (the substance release provisions) EPO does not extend to the landowner or occupier of the land. It is possible to imagine circumstances when different parties might be ordered to take conflicting measures with respect to a brownfield. For example, an executive officer may order the landowner to remove a LUST and contaminated topsoil to a depth of two metres, while Alberta Environment may require that the polluter remove a LUST and topsoil only to a depth of one metre so long as it maintains risk-based monitoring and containment measures. Equally, it is possible that each party is ordered to take the same steps, thus duplicating responsibility for cleanup and remediation. At the same time, a safety codes officer may refuse to grant the owner of a LUST a permit to remove the storage tank at all, unless the owner of the LUST meets certain municipal guidelines. The potential for conflict is high when there are a multiplicity of parties involved and room for statutory discretion among a number of regulators over the same subject-matter. There is nothing in the legislation setting out which process should be followed and when.

If an owner fails to carry out the terms of a *PHA* order, an executive officer, or anyone else, may carry out the work and the costs incurred by the regional health authority becomes a debt to be attached to the tax rolls of the land.<sup>241</sup> Yet, if the owner is not also a polluter, *EPEA* may not impose any duties on them with respect to the reporting, cleanup, or remediation of the site. As a question of fairness and efficiency it makes little sense that a person, in this case the property owner, escapes liability under *EPEA*, but can be liable under the *PHA* for the same subject-matter. Similar to the difference between *EPEA* and the *WA*, this again calls for the inclusion of the landowner as a person responsible throughout *EPEA*. It also suggests that various regulatory bodies provide comprehensive guidelines to stakeholders to advise them on how the process should operate and how conflicts, if and when they arise, will be resolved.

### 2.2.2.3. Summary

In this Part I have outlined the salient features of *EPEA*, the principle legislative tool authorizing Alberta Environment to manage brownfields in Alberta. I have also noted several key pieces of provincial legislation that impact on brownfields, such as the *WA*, the *SCA*, and the *PHA*. These three pieces of legislation introduce two additional regulators besides Alberta Environment in the regulatory field — a local or municipal

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<sup>240</sup> *PHA*, s 1(ff).

<sup>241</sup> *PHA*, s 63. Under the restructuring of health care in Alberta, the *PHA* is now administered by Alberta Health Services. The nine regional health authorities have been absorbed by a central, administrative body with local or regional offices.

authority through the *SCA*, and Alberta Health Services through the *PHA*. Through the *SCA*, at least one other party might become responsible for cleanup and remediation of a brownfield: the owner of a leaking underground storage tank.

Alberta Environment's approach to contaminated sites is problematic. First, it makes little sense that Alberta Environment, as a policy choice, avoids holding the landowner accountable under the contaminated sites provisions of *EPEA*, and instead prefers to rely on the substance release provisions, while under the *WA* the landowner is expected to deal with the contamination of their land. This is further confused by who is the operator of a designated activity under the conservation and reclamation section of *EPEA*. Landowners, unless they are also the polluter, fall outside the regulatory net. This inconsistency is aggravated by the fact Alberta Health Services, through the *PHA*, can hold landowners accountable for any contamination found on their land. In this case, Alberta Environment's policy under *EPEA* is inconsistent with other regulatory provisions dealing with brownfields, and it appears very much like a retreat from the regulatory field. Even if liability should fall first to the polluter, as the B.C. Advisory Panel on Contaminated Sites notes, the current owner or occupier of land should remain liable because they are easier to find and ultimately may benefit from any remediation efforts.<sup>242</sup> In addition, the traditional basis for environmental regulation is often founded in property theory — either as nuisance law or as *Rylands*-like liability — simply because brownfields are by definition a problem with contaminated land. A shift away from the property owner to the polluter only, particularly in a property-centric society, risks losing sight of the most obvious gatekeeper. A landowner controls the land for the purpose of access, reporting, monitoring, testing, and ultimately cleanup, but also controls, or controlled, the persons or activities that were allowed on the land. In most cases, the landowner benefitted, directly or indirectly, from those same activities.

Second, there is considerable room under Alberta's legislative framework for a more streamlined regulatory process. That would avoid the potential for conflict where legislative and administrative efforts converge. Just within the provincial administrative scheme, there are at least three administrative agents occupying the field: Alberta Environment, a local or municipal authority, and Alberta Health Services. Conflict and uncertainty increase transaction costs, something any regulatory system should attempt to avoid wherever possible.

Third, the *PHA* has priority over *EPEA* and the *WA* where there is conflict. Intuitively, as an environmental protection statute, one would assume Alberta Environment's role should take precedence with respect to the governance of brownfields, but that is simply not the case here.

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<sup>242</sup> BC Advisory Panel, *Final Report*, *supra* note 96 at 97.

## 2.3. The Federal Role in Brownfields

The discussion on the provincial legislative framework above inevitably leads to a discussion of the role of the federal government. The federal role in governing brownfields, and environmental matters generally, is based on the division of powers in the Canadian Constitution. The federal authority has concurrent jurisdiction to regulate brownfields, subject to certain limitations from provincial activities in the field. While the federal government has deferred to the provinces in many instances, the federal authorities do regulate brownfields through both legislation and financial incentives. There are a number of ways federal legislation affects brownfields, such as through criminal law, taxation, trade and commerce, navigable waterways and fisheries, bankruptcy and insolvency, matters of international or interprovincial scope, or matters of national importance, I will narrow this discussion to the role that the *CEPA* plays in regulating brownfields in Canada. The purpose of this part is not to demonstrate all of the ways federal laws impact brownfields in Alberta, but to show how federal involvement can both complicate the administrative process and complement the efforts of provincial and local authorities.

### 2.3.1. The *CEPA*

The *CEPA* is the principal federal environmental protection legislation in Canada.<sup>243</sup> In the preamble it declares itself to be focused squarely on “sustainable development through pollution prevention”<sup>244</sup> measures, an inventory and regulated substances approach,<sup>245</sup> rather than targeting the cleanup of blighted lands or the elimination of past contamination. Although section 65 of *CEPA* specifically refers to the virtual elimination from the environment of certain risky contaminants, so far little progress has been made toward listing these chemicals, let alone eliminating them.<sup>246</sup> The federal approach focuses on the regulation of certain types of chemicals rather than on the spill of a toxic substance itself, thus placing *CEPA* within the federal authority to regulate the manufacture and supply of toxic substances under the federal trade and commerce power.

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<sup>243</sup> *Canadian Environmental Protection Act, 1999*, SC 1999, c 33 [*CEPA*].

<sup>244</sup> *CEPA*, Declaration.

<sup>245</sup> There are two key approaches to toxic substances adopted by the federal government in *CEPA*: (1) the development of partnerships with the provincial and territorial authorities through equivalency agreements; and (2) the chemicals management plan, with its emphasis on information gathering and regulation of product sale, manufacture, use, export/import, and labelling. In respect of contaminated sites, these laws target the manufacturers and suppliers of toxic substances. These restrictions suggest an attempt to align regulations with the federal trade and commerce power.

<sup>246</sup> *CEPA*, s 65 and the *Virtual Elimination List*, SOR/2006-298. To date, there is only one chemical substance on the list, hexachlorobutadiene.

Part 5 of *CEPA* prohibits the release of any substance on the List of Toxic Substances in Schedule 1 of the Act.<sup>247</sup> Those persons responsible for a prohibited release must report it and remediate the site.<sup>248</sup> In this way, *CEPA* is similar to the substance release provisions found in parallel provincial and territorial environmental protection legislation. However, two important differences should be recognized. First, as a matter of managing contaminated lands, *CEPA*, as a federal statute, focuses largely on brownfields that affect federal lands.<sup>249</sup> Brownfields on federal lands fall within federal competence to regulate in the field. Second, as to the regulation of toxic substances, Part 5 of *CEPA* only deals with substances that appear on the Priority Substances List, except in the case of an environmental emergency of federal concern.<sup>250</sup> This shifts *CEPA*'s emphasis toward the management of toxic products as an aspect of the federal trade and commerce power, while leaving the regulation of toxic spills and contaminated land largely to the provincial authorities.

According to the CCME, federal authority is limited to contaminated sites on federally-owned public lands, sites subject to federal law by federal-provincial agreement, or where no federal or provincial legislation already exists.<sup>251</sup> Thus, *CEPA* would clearly apply to the decommissioning of former military bases and federal public works, as well as landfills and other contaminants found on lands designated for airports, aboriginal reserves, and national parks throughout Canada. However, the CCME puts the case for exclusive provincial jurisdiction over contaminated sites a bit too strongly. As a matter of trade and commerce, the toxic release provisions of *CEPA* may require that manufacturers and suppliers of toxic substances clean up property their products contaminate, and when they provide inadequate labels or warnings on their products.<sup>252</sup> *CEPA* also regulates the management of a number of contaminants such as halocarbons,<sup>253</sup> ozone-depleting substances,<sup>254</sup> and polychlorinated biphenyls (PCBs)<sup>255</sup>

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<sup>247</sup> *CEPA*, Part 5.

<sup>248</sup> *CEPA*, s 95.

<sup>249</sup> This includes airports, aboriginal lands, national parks and wildlife preserves, federal public lands, railways, navigable waterways, and military bases, and coastal areas and seaports.

<sup>250</sup> *CEPA*, s 94.

<sup>251</sup> CCME, *Guidance Document*, *supra* note 31 at 5.

<sup>252</sup> More specifically, *CEPA* requires that a manufacturer, processor, importer, retailer or distributor of a toxic substance or product, cleaning product, or fuel to notify the public of any danger to the environment or to human life or health, and to, generally, take any measures to protect the environment and human life or health, see: *CEPA*, ss 99, 119 & 148. That may include the remediation of a site contaminated by that toxic substance or product, cleaning product, or fuel.

<sup>253</sup> *Federal Halocarbons Regulations, 2003*, SOR/2003-289.

<sup>254</sup> *Ozone-Depleting Substances Regulations, 1998*, SOR/99-7.

<sup>255</sup> *PCB Regulations*, SOR/2008-273.

and commercial or industrial processes such as chromium electroplating,<sup>256</sup> the use of certain solvents in drycleaning businesses,<sup>257</sup> and leaking petroleum storage tanks.<sup>258</sup> Thus, there remains some room for federal authorities to regulate the field. This might be either as a matter of product liability for toxic substances or as a matter of product labeling and warnings.

Under *CEPA* an enforcement officer has a number of tools available to enforce compliance with the Act. First, where any person required to remediate fails to do so, an enforcement officer may take measures, or direct another person to take measures, to perform the cleanup.<sup>259</sup> Those costs and expenses are recoverable against a polluter.<sup>260</sup> Second, an enforcement officer may issue an environmental protection compliance order, requiring, among other things, that a person do or refrain from doing, or stop, shut down or cease an activity, work, undertaking or thing.<sup>261</sup> A person receiving a compliance order shall immediately comply, failing which an enforcement officer can take any measures to fulfill the order.<sup>262</sup> Third, in the event a prohibited release creates an environmental emergency, Part 8 of *CEPA* imposes some important requirements on the polluter. Beyond a general obligation “to repair, reduce or mitigate any negative effects”,<sup>263</sup> a polluter is also liable: (a) for restoring the environment from any damages; and (b) for costs and expenses reasonably incurred by the federal authorities to prevent, repair, remedy or minimize the contamination.<sup>264</sup>

*CEPA* liability is strict, joint and several.<sup>265</sup> A person who “owns or has the charge, management or control of a substance immediately before its release”, or who “causes or contributes to the release” is liable.<sup>266</sup> Primary responsibility falls to those who owned or controlled the toxic substance at the time it was released, while those who merely caused

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<sup>256</sup> *Chromium Electroplating, Chromium Anodizing and Reverse Etching Regulations*, SOR/2009-162.

<sup>257</sup> *Tetrachloroethylene (Use in Drycleaning and Reporting Requirements) Regulations*, SOR/2003-79 [*Tetrachloroethylene Regulations*].

<sup>258</sup> *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations*, SOR/2008-197 [*Storage Tank Regulations*].

<sup>259</sup> *CEPA*, s 95(5).

<sup>260</sup> *CEPA*, ss 98(1)-(2).

<sup>261</sup> *CEPA*, s 235(4).

<sup>262</sup> *CEPA*, ss 238-239.

<sup>263</sup> *CEPA*, s 201(1)(b).

<sup>264</sup> *CEPA*, s 205(1).

<sup>265</sup> *CEPA*, ss 98(3), 203(3) & 240(3).

<sup>266</sup> *CEPA*, s 95(2).

or contributed to the release form a secondary category.<sup>267</sup> *CEPA* also holds the manufacturer and supplier of a toxic substance and those who introduced a toxic substance or product, cleaning product, or fuel into the market liable, and requires them to notify the public of a risk and to remedy any adverse situation.<sup>268</sup> In this way, *CEPA* narrows liability to those who own or control a contaminant when it was released into the environment and those who introduced a toxic product into the marketplace.

Putting aside *CEPA*'s role in managing brownfields on federal lands for a moment, *CEPA* will only affect the regulation of brownfield cleanup and remediation where a listed toxic product was manufactured or supplied in Canada. In other cases, it simply will not apply. The list of toxic substances under *CEPA* consists of 128 chemicals as of 21 November 2012.<sup>269</sup> Each of these substances is prohibited under section 65 of *CEPA* where it enters the environment in a concentration that may be harmful to human health and the environment.<sup>270</sup>

In the case of drycleaners, for example, Environment Canada has actively pursued businesses currently using tetrachloroethylene, also known as perchloroethylene (PERC) for spot cleaning under the *Tetrachloroethylene Regulations*.<sup>271</sup> From 40 inspections and 19 written warnings in 2003-2004 when the regulations came into force, Environment Canada performed 1,032 inspections, and issued 402 written warnings and 117 compliance orders in 2008-2009.<sup>272</sup> However, the data does not indicate whether any of these cases involved historic PERC contamination.

Where there is historic contamination, an enforcement officer from Environment Canada may order the cleanup of a brownfield, not because the site is contaminated but because a listed toxic substance was released. In that case, not only might the polluter become liable under both federal and provincial laws (*CEPA* and *EPEA*), and in some cases the landowner under provincial law (the *PHA*), but also the manufacturer or supplier of a toxic substance under *CEPA*. In the case of a leaking underground storage tank, for example, the owner of the tank may be liable under the *SCA* and the owner of

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<sup>267</sup> This may be inferred from the strict liability of a person who owned or controlled a toxic substance prior to its release. Those who caused or contributed to the release are held to a knowledge or negligence standard. See: *CEPA*, ss 98(1)(b) & (4).

<sup>268</sup> *CEPA*, ss 99, 119 & 148.

<sup>269</sup> For the Toxic Substances List – Schedule 1, see: *CEPA*.

<sup>270</sup> *CEPA*, ss 65 & 90(1).

<sup>271</sup> *Tetrachloroethylene Regulations*, *supra* note 257.

<sup>272</sup> Environment Canada, *Enforcement Activities Carried Out under Canadian Environmental Protection Act, 1999 during Fiscal Year 2003-2004*, dated 13 December 2004 and *Enforcement Activities and Measures Carried Out under Canadian Environmental Protection Act, 1999 during Fiscal Year 2008-2009*.

the gasoline and the operator of a former gas station under *EPEA*, but also the manufacturer or supplier of the gasoline may be liable under *CEPA* (but only if it is a listed substance).<sup>273</sup> When a person responsible fails to perform the ordered remediation, section 95 of *CEPA* permits an enforcement officer to conscript anyone to complete the work.<sup>274</sup> That could extend *CEPA*'s reach to include the current landowner or occupier of the land, even though they may not have been present when the land was contaminated. It also puts Environment Canada into the regulatory mix alongside Alberta Environment, a local or municipal authority, and Alberta Health Services.<sup>275</sup> If the four agencies, representing all three levels of government, do not effectively coordinate their efforts, it would be easy for inspection, management, and enforcement efforts to become disorganized and ineffective. Given the risk of conflicting legislation and competing administrative goals, as well as the ever expanding list of potentially liable parties, great care needs to be exercised by regulators to ensure the process remains fair and efficient.

In the case of contamination on federal lands, the case for federal intervention in a brownfield is far more extensive and certain. Under Part 9 of *CEPA* Environment Canada may order that a polluter cleanup the site, and if the polluter does not, Environment Canada may order anyone to do it, and the cost of remediation is recoverable against the polluter.<sup>276</sup> The *Storage Tank Regulations* under *CEPA*, for example, apply to storage tank systems found on federal lands.<sup>277</sup> It holds the owner or operator of a storage tank system responsible for repair, monitoring, maintenance, and cleanup as result of any leak,

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<sup>273</sup> In many cases, the petroleum products released into the ground years ago contain chemicals on the toxic substances list such as lead, arsenic and mercury that would otherwise be banned from current use under *CEPA*.

<sup>274</sup> *CEPA*, s 95.

<sup>275</sup> While the federal authorities and the government of Alberta have an equalization agreement in place that withdraws the federal regulatory authority over some toxic substances in Alberta, the agreement does not cover all toxic substances. The federal authorities withdraw only applies to vinyl chloride, secondary lead smelter release, and pulp and paper mill effluent chlorinated dioxins and furans, see: *Alberta Equivalency Order*, SOR/94-752, s 2. In the case of tetrachloroethylene, Environment Canada has actively prosecuted a number of suppliers and drycleaners in Alberta under *CEPA* in recent years. See, for example: Environment Canada, Notification, "Chemical distributor fined \$5,000 for the illegal sale of tetrachloroethylene to a dry-cleaning facility" (2 March 2010); Notification, "Drayton Valley Dry Cleaning Facility Fined \$5,000 For Illegal Storage of Tetrachloroethylene Waste" (17 May 2010); Notification, "Edmonton Dry Cleaner Required to Pay \$10,000 For Environmental Offences" (26 July 2010); Notification, "Fishman's Personal Care Cleaners (Calgary Economy Cleaners and Launderers Ltd) Required to Pay \$5,000 for Environmental Offence" (6 October 2010); Notification, "Lynwood Drycleaners (Toudai Technologies) Required to Pay \$6,000 for Environmental Offences" (1 November 2010); and Notification, "Seabreeze Cleaners and Owner Required to Pay \$8500 for Environmental Offences and Providing False Information" (24 February 2011).

<sup>276</sup> *CEPA*, Part 9.

<sup>277</sup> *Storage Tank Regulations*, *supra* note 258, s 2(1).

and even for the preparation of an emergency plan.<sup>278</sup>

### **2.3.2. Federal Funding of Brownfield Projects**

One area where there is considerable consensus among commentators is the call for federal authorities to take on a greater role in financing brownfield redevelopment. Federal authorities may be in a better position to fund brownfield programs because of their superior access to capital through the general tax power. So far, only the provinces of Ontario and Québec have provided significant financial incentives for brownfield redevelopment at the provincial level.<sup>279</sup>

First, the NRTEE recommends amendments to section 18 and 20(1) of the *Income Tax Act (ITA)*<sup>280</sup> to allow remediation expenses to be treated as deductible expenses.<sup>281</sup> As they stand now, cleanup and remediation expenses are more commonly characterized as a capital expenditure because they improve the value of the land rather than an expense for the purpose of earning income; although it is possible for some remediation expenses to be characterized as repairs that prevent waste and would therefore be deductible expenses.<sup>282</sup> The cost of investigating a site, for example, is deductible as are representations made to government officials to obtain a license or permit to perform cleanup and remediation.<sup>283</sup> Legal and accounting costs as well as normal business expenses would also be allowable deductions if incurred in the ordinary course of business to earn income from a business or property.<sup>284</sup>

For greater clarity, the NRTEE recommends an amendment that would clarify that remediation expenses are deductible in the year incurred rather than being deferred as a capital expense that cannot be recovered until the property is sold or depreciated over the

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<sup>278</sup> *Ibid*, ss 3-46.

<sup>279</sup> RCI Consulting, *supra* note 9 at 25.

<sup>280</sup> RSC 1985 (5<sup>th</sup> Supp), c 1 [*ITA*].

<sup>281</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 19.

<sup>282</sup> See: Peter W Hogg, Joanne E Magee & Jinyan Ji, *Principles of Canadian Income Tax Law*, 5<sup>th</sup> ed (Toronto: Thomson Carswell, 2005) at 211-212 and Kashif Haque, "Internal Revenue Code Section 198: The Tax Incentive for Brownfield Redevelopment: A Sheep in Wolf's Clothing" (2002) 8 *JL & Pol'y* 371 at 380-381.

<sup>283</sup> *ITA*, *supra* note 280, ss 20(1)(cc)-(dd). See also: Canada Revenue Agency, Interpretation Bulletin IT-350R, "Investigation of Site" (6 June 1977).

<sup>284</sup> *ITA*, *ibid*, s 18(1)(a).



useful life of the property.<sup>285</sup> In the U.S. the federal government offers a tax deduction for brownfield remediation of hazardous substances at a qualified site.<sup>286</sup> Some benefits of a tax deduction, when compared with grants and loans, are that it can be accessed by companies more easily, require less government administration and oversight, and is subject to the normal rules of accountability and compliance.<sup>287</sup> It significantly improves a developer's financial position at the onset of a project by lowering the developer's taxable income in the early phases of a brownfield project.<sup>288</sup> This creates a cash-flow cushion for the developer to deal with upfront capital costs.<sup>289</sup> The downside of a tax deduction is the deduction is subject to the recapture rules and will have to be added back as additional taxable income upon the sale of the land.<sup>290</sup> So it merely shifts recognition of a portion of taxable income to some future date.

Alternatively, the NRTEE recommends a refundable tax credit similar to the Scientific Research and Experimental Development Program in sections 37 and 127 of the *ITA*.<sup>291</sup> A tax credit reduces a payor's tax liability by the amount of the credit, and in the case of a refundable tax credit may result in a tax refund if income is sufficiently low.<sup>292</sup> However, tax credits have not been particularly meaningful for encouraging developers to pursue brownfield redevelopment.<sup>293</sup> This is because tax credits merely reduce a payor's tax liability that may prove negligible in the face of significant cleanup costs.

Second, the NRTEE recommends both grants and low-interest loans for qualifying brownfield projects.<sup>294</sup> Federal funding for brownfields has come through a number of

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<sup>285</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 20 and Scott Sherman, "Government Tax and Financial Incentives in Brownfields Redevelopment: Inside the Developer's Pro Forma" (2003) 11 NYU *Envtl LJ* 317 at 361.

<sup>286</sup> See: United States Environmental Protection Agency, *Brownfields Tax Incentive Guidelines*, EPA-560-F-07-002 (Washington, DC: US Environmental Protection Agency, 2007) at 1 and Haque, *supra* note 282 at 383.

<sup>287</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 20.

<sup>288</sup> Sherman, *supra* note 285 at 361.

<sup>289</sup> Paul Morassutti et al, "Doing the Brownfields Deal" in Abdel-Aziz & Chalifour, *supra* note 24 8-1 at §§8.89-8.90.

<sup>290</sup> *Ibid* at 370.

<sup>291</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 20.

<sup>292</sup> See: Haque, *supra* note 282 at 382-383. The distinction between a deduction and a tax credit is important. A deduction reduces the payor's taxable income by the amount of the deduction. A tax credit is calculated after taxable income is established and merely reduces the tax liability of the payor. See also the discussion in Hogg, Magee & Ji, *supra* note 282 at 188 & 456-460.

<sup>293</sup> Davis, *supra* note 168 at 11.

<sup>294</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 22-24.

targeted financial programs, including funding to improve and repair public infrastructure under the Building Canada program,<sup>295</sup> grants and low-interest loans for innovative strategies by municipalities and to help municipalities with remediation costs under the Green Municipal Fund,<sup>296</sup> and GST rebates for municipalities that place more funds directly in the hands of municipalities under the “New Deal” program.<sup>297</sup> Much of these funding efforts have funneled cash into municipal projects and municipal hands as a stimulus to urban revitalization and capital improvement. This has ensured that funds are placed in the hands of local authorities who are better able to assess the needs of the community.

The impact of government grants and loans on brownfield redevelopment may vary significantly depending on their structure. Grants that only help offset the cost of site assessment ease up-front costs, but the overall effect of these grants on a project is probably “minimal.”<sup>298</sup> The grants would not cut operating expenses, and the rate of return and net present value would only increase slightly.<sup>299</sup> Grants that offset the cost of acquisition, cleanup and redevelopment would significantly improve a project’s rate of return and net present value because it lowers the developer’s overall debt load.<sup>300</sup> Since grants are not repaid, the bottom-line profitability of the project is enhanced. However, low-interest loans for site assessment and remediation would simply lower debt service costs, but would not lower the overall cost of the project very much, so the impact of low-interest loans is probably “minimal.”<sup>301</sup> Therefore, great care needs to be taken to ensure federal finance programs are maximizing the cleanup and redevelopment of brownfields. The focus of federal funding should be on grants to offset the cost of acquisition, cleanup and redevelopment, as these funds seem to have the greatest positive impact on the developer’s bottom-line.

## 2.4. Municipal Authority Over Brownfields

There is considerable room for active municipal participation in the regulation of brownfields. Federal and provincial authorities are withdrawing from some areas of the environmental field through deregulation, and brownfields are largely perceived as an

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<sup>295</sup> Canada, *Building Canada*, *supra* note 48.

<sup>296</sup> Federation of Canadian Municipalities, *supra* note 48 and FCM Centre for Sustainable Community Development, *supra* note 48.

<sup>297</sup> Chalifour, *supra* note 48 at §§11-57-11.59.

<sup>298</sup> Sherman, *supra* note 285 at 350.

<sup>299</sup> *Ibid.*

<sup>300</sup> *Ibid* at 351-352.

<sup>301</sup> *Ibid* at 352.

urban and local problem calling for local solutions. Municipalities have “a vested interest” in brownfield cleanup<sup>302</sup> and may represent the biggest “bang” for the benefit “buck.”<sup>303</sup> Brownfields impact on municipal long-term planning strategies. Finding more active municipal action in response to blighted lands should therefore come as little surprise. Greater municipal participation may occur from at least three developments: (1) the natural extension of the municipal authority over public health and safety in the community; (2) the delegation of provincial jurisdiction over brownfields to municipalities, particularly through land-use planning strategies; and (3) as an outgrowth of the recent authorization in some provinces of area-wide redevelopment plans as a municipal planning tool. This section of the paper explores each development, indicating some of the strengths and weaknesses that come with municipal action in environmental matters.

Under the *Municipal Government Act (MGA)* a municipality in Alberta has the power to pass bylaws for municipal purposes and within its boundaries, including, among other purposes, for “the safety, health and welfare of people and the protection of people and property” and in respect to nuisances.<sup>304</sup> Municipal governments may regulate or prohibit and deal with any development, activity, industry, business or thing.<sup>305</sup> Municipalities may create offences, inspect, impose fines or penalties, and remedy any contravention of a bylaw.<sup>306</sup> Municipal bylaws may regulate or prohibit activities at facilities often associated with brownfields, such as gas stations, drycleaners or chemical plants.<sup>307</sup> Thus, there is nothing prohibiting municipalities from passing bylaws to address brownfields as a public nuisance. This view finds some support in *Montréal (City) v. 2952-1366 Québec Inc.*, where a municipal noise bylaw was upheld as a valid exercise of municipal authority over a public nuisance.<sup>308</sup> Traditionally, municipalities dealt with public nuisances before such matters fell under criminal codes or provincial regulatory authority. It is not much of a stretch for municipalities to extend their reach further into public nuisances to brownfields. In many cases, it is a return to a venerable tradition for municipal authorities.

So far, most municipalities in Alberta have construed their authority over abandoned and derelict lands narrowly, only in relation to the limits imposed by section 66 of the SCA. Section 66 of the SCA limits safety bylaws to fire prevention and protection,

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<sup>302</sup> RCI Consulting, *supra* note 9 at 33.

<sup>303</sup> Robert A Simons, “Creative Financing of Brownfield Sites” in Davis, *supra* note 168 at 104.

<sup>304</sup> *MGA*, ss 7(a) & (c).

<sup>305</sup> *MGA*, ss 8(a) & (b).

<sup>306</sup> *MGA*, s 7(i) and Part 13, Divisions 4 and 5.

<sup>307</sup> See: *MGA, ibid*, s 8(a).

<sup>308</sup> [2005] 3 SCR 141.

minimum maintenance standards, and unsightly or derelict buildings.<sup>309</sup> The City of Calgary's Bylaw for Nuisances, Safety and Liveability could extend to brownfields, particularly under Part 10 as to nuisances, but no specific provision is made for brownfields within its language.<sup>310</sup> Similarly, the nuisance provisions of the City of Edmonton's Bylaw for Community Standards focus narrowly on the lack of maintenance and upkeep of the land or buildings rather than on contamination.<sup>311</sup> Red Deer's *Community Standards Bylaw*<sup>312</sup> and Fort McMurray's *Nuisance Property Bylaw*,<sup>313</sup> on the other hand, are broader and extend the meaning of nuisance to include any use of or activity that may have a "detrimental impact." Red Deer's bylaw makes a distinction between a nuisance and a safety hazard, which may permit Red Deer more flexibility in imposing a strict duty to eliminate or abate an identified nuisance.<sup>314</sup>

*EPEA* poses no restrictions on the use of municipal bylaws for regulating brownfields. In fact the Minister can delegate its powers under *EPEA* to any person including a municipal body or local authority.<sup>315</sup> Ontario has already gone down this road. In Ontario, the province no longer reviews remedial plans or oversees contaminated site cleanup, leaving environmental plan review to the municipalities through their land-use planning tools under the *Planning Act*.<sup>316</sup> To add to this, recent court decisions support a broader role for municipalities in public health and safety.<sup>317</sup>

Beyond public health and safety, recent developments in Ontario have expanded municipal authority over environmental public nuisances. In 2006 the Town of Newmarket brought a public nuisance claim against a waste recycling plant for odours emitted from the facility.<sup>318</sup> The court held that the municipality had the authority to

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<sup>309</sup> *SCA*, s 66.

<sup>310</sup> See: Calgary, By-law No 5M2004, *Being a Bylaw of the City of Calgary to Regulate Neighbourhood Nuisances, Safety and Liveability Issues* (3 May 2004). The specified categories of nuisance under the bylaw are water damage, smoke and dust, light, and flyers and debris, *ibid*, ss 41-43.

<sup>311</sup> See: Edmonton, Bylaw 14600, *Community Standards Bylaw* (13 February 2008), ss 6 & 9.

<sup>312</sup> Red Deer, Bylaw No 3383/2007, *Community Standards Bylaw* (12 February 2007), ss 11-12.

<sup>313</sup> Fort McMurray, Bylaw No 00/078, *Nuisance Property Bylaw* (2000), s 2.11.

<sup>314</sup> Red Deer, *Community Standards Bylaw*, *supra* note 312, s 16(2)(c).

<sup>315</sup> *EPEA*, ss 17-19.

<sup>316</sup> RCI Consulting, *supra* note 9 at 11. See also: Ontario, Ministry of Environment and Energy, *Guideline for Use at Contaminated Sites in Ontario*, PIBS 3161E01 (Toronto: Queen's Printer for Ontario, 1997) at 77-85.

<sup>317</sup> See: *Shell Canada Products Ltd v Vancouver (City)*, [1994] 1 SCR 231; *Nanaimo (City) v Rascal Trucking Ltd*, [2000] 1 SCR 342; and *Spraytech*, *supra* note 45.

<sup>318</sup> See: William M Glenn & Barry Spiegel, "Small Town Breaks Legal Ground to Clean Up Odour Problem" (March 2007) 117 *Municipal World* 17.

regulate public nuisances within its boundaries and that the Ontario *Environmental Protection Act* did not preclude municipal action in environmental protection.<sup>319</sup> While the plant was ordered to be shut down, a stay was granted to allow the company to complete its remedial action plan.<sup>320</sup> This has opened the field to greater municipal involvement in environmental protection, not merely as the overseers of land use and planning within municipal boundaries, but also as a regulator for public health and safety, including the environment, within the municipality.

Beyond the legal authority to regulate for environmental protection, there is general public support for municipalities to engage in regulating the environment. A report by The Strategic Counsel to the Federation of Canadian Municipalities, *Benchmark: A Report on the Key Issues and Challenges Facing Canadian Municipalities, 2008*, strongly suggests that most Canadians favour municipal action in developing environmental protection strategies with the financial assistance of the federal government.<sup>321</sup> The Report indicates that most Canadians believe more tax dollars should be provided to municipalities by transfer payments from the federal government.<sup>322</sup> Almost three-quarters of Canadians believe that municipalities have a role to play in environmental protection.<sup>323</sup> Thus, municipalities in Alberta have not only the legal authority, but also a public mandate, to take on a more expansive role in regulating brownfield cleanup and redevelopment.

In recent years some municipalities have begun implementing area-wide redevelopment plans. These plans permit municipalities to rezone and restructure inner city neighbourhoods to better coordinate urban sustainability and community-wide revitalization.<sup>324</sup> These plans complement existing municipal authority over building permits, land-use planning and development, and environmental management.<sup>325</sup> In Alberta, a municipal authority may establish an area redevelopment plan (ARP) for the

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<sup>319</sup> *Newmarket (Town) v Halton Recycling Ltd*, 2006 CarswellOnt 5920 (Ont SCJ) at paras 76, 85 & 87.

<sup>320</sup> *Ibid* at para 114.

<sup>321</sup> The Strategic Counsel, *A Report to Federation of Canadian Municipalities: Benchmark: A Report on the Key Issues and Challenges Facing Canadian Municipalities, 2008* (Toronto: The Strategic Counsel, 2008) at 13.

<sup>322</sup> *Ibid* at 25-30.

<sup>323</sup> *Ibid* at 87.

<sup>324</sup> Ontario, *A Practical Guide*, *supra* note 16 at 15.

<sup>325</sup> For example, any development project in the City of Calgary requires a development permit: see: Calgary, By-law No 1P2007, *The City of Calgary Land Use Bylaw* (23 July 2007), s 23 [Calgary, *Land Use Bylaw*]. In addition, a toxic release or the discovery of contamination must be reported to the appropriate authorities, including the Fire Department/HazMat: see: Calgary, *Contamination Discovery Response Procedure for Ground Disturbance*, EM 446 – Contamination Discovery (Calgary: City of Calgary, 2008) at 5-6 and *Corporate Substance Release Reporting Program* (Calgary: City of Calgary, 2003) at 6-8.

purpose of redeveloping an area, and that plan may include the preservation, improvement and restoration of any lands and buildings found there.<sup>326</sup> ARPs are much narrower in scope than a municipal development plan, which is the overall blueprint for the municipality as a whole, and gives municipalities more specific control in planning and developing an existing neighbourhood.<sup>327</sup> Under an ARP a municipality may expropriate the land necessary to fulfill its goals and objectives.<sup>328</sup> In addition, a municipality may also impose a Community Revitalization Levy (CRL) to help finance the cost of redevelopment.<sup>329</sup> In Alberta, three Community Revitalization Plans (CRPs) have been formed: the Rivers District in Calgary,<sup>330</sup> the Quarters Downtown in Edmonton,<sup>331</sup> and the Belvedere in Edmonton.<sup>332</sup>

Municipalities have been given broad discretion to implement area-wide redevelopment plans despite some opposition from landowners to changes in zoning and land development rules.<sup>333</sup> This seems necessary for any coordinated program of community redevelopment and revitalization within a municipality. ARPs stand as a blueprint for dealing with brownfields, if only incident to community redevelopment and revitalization as a whole. Any historic contamination found on lands within the neighbourhood would have to be addressed by the ARP.

To encourage greater municipal involvement in brownfields, some have called for greater immunity for municipalities from regulatory liability.<sup>334</sup> This makes sense for provinces that have shifted most land planning and approval duties to municipal authorities.<sup>335</sup> Many provinces already provide liability exemptions for municipalities

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<sup>326</sup> MGA, s 634.

<sup>327</sup> See: Alberta Municipal Affairs, *The Legislative Framework for Municipal Planning, Subdivision, and Development Control* (Edmonton: Alberta Municipal Affairs, 2002) at 2.

<sup>328</sup> MGA, s 14(2).

<sup>329</sup> MGA, Part 10, Division 4.1.

<sup>330</sup> *City of Calgary Rivers District Community Revitalization Levy Regulation*, Alta Reg 232/2006.

<sup>331</sup> *City of Edmonton Quarters Downtown Community Revitalization Levy Regulation*, Alta Reg 173/2010.

<sup>332</sup> *City of Edmonton Belvedere Community Revitalization Levy Regulation*, Alta Reg 57/2010.

<sup>333</sup> In *Les Enterprises Sibeca Inc v Frelighsburg (Municipality)*, [2004] 3 SCR 304, a real estate developer sued the municipality for loss of profits that arose after the municipality changed its zoning to the detriment of the developer. Deschamps J, for the majority, held at paragraph 23 that a municipality cannot be held liable for the exercise of its regulatory power if it acts in good faith or the exercise of this power is not irrational.

<sup>334</sup> See, for example: BC Advisory Panel, *Final Report*, *supra* note 96 at 146-148.

<sup>335</sup> RCI Consulting, *supra* note 9 at 17.

when they acquire contaminated land by way of a gift or through tax arrears.<sup>336</sup> Jodie Hierlmeier calls for an extension of this immunity when municipalities obtain land by expropriation for the construction of public works.<sup>337</sup> However, this doesn't solve the funding problem. While a municipality that acquires contaminated land by way of gift, tax arrears or by expropriation may not have any regulatory liability to cleanup the site, in order to redevelop the land (even to build municipal infrastructure) requires remediation in accordance with regulatory standards. If the polluter cannot be found or made to pay, the municipality will be on the hook for the cost of cleanup. Without funding, in those cases, the municipal authority is caught in a no-win situation. For municipalities to become in effect stewards of brownfields requires a commitment on the part of the federal or provincial authorities to help finance the cost of cleanup. Even where there is a solvent polluter, the municipality would likely have to finance the cost of cleanup in order to get the project completed on time and hope those costs can be collected from the polluter at a later date, perhaps after a number of years of litigation.

## 2.5. Conclusion

This section has shown how legislative efforts by both the federal and provincial authorities, along with the regulatory activities of some municipalities have converged in the brownfield context. In Alberta, the regulatory field for brownfields cleanup and redevelopment is occupied by a number of federal, provincial and municipal laws and regulators. First, provincial authorities have largely targeted the cleanup and remediation process through *EPEA*, but also as an incident to water quality, public health and safety legislation. The overlap, in some cases, may create confusion and uncertainty for industry, landowners and developers, as well as for government regulators, and this uncertainty may lead to higher transaction costs. The streamlining of administrative authority and regulatory rules may reduce conflict and costs, thus bringing fairness and more efficiency to the regulatory system.

However, the area of greatest concern arises from the general retreat by Alberta Environment from *EPEA*'s contaminated sites provisions. It leaves those provisions in a state of limbo. As things currently stand it is difficult to say whether the contaminated sites provisions should be seen as a strange artifact of unfulfilled legislative intentions or

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<sup>336</sup> *EPEA*, s 1(tt)(v). In Ontario, municipalities are exempt from liability when they take certain actions to investigate or secure the site, or when they take title due to a failed tax sale, see: Ontario, *Records of Site Condition*, *supra* note 81 at 46-47 and Ontario *Environmental Protection Act*, ss 168.12-168.16. Exemptions are also found in British Columbia, Saskatchewan, and Manitoba, see: *EMA*, ss 46(1)(g)-(g.1), *EMPA*, s 2(w)(vii), and *CSRA*, s 9(2)(b). Québec adopts a different approach. In Québec the Minister holds a person and municipality equally responsible for site assessment and remediation, unless it could not know of the contamination, and once it became aware of the problem it took reasonable steps, see: *Environmental Quality Act (EQA)*, s 31.43.

<sup>337</sup> Hierlmeier, *supra* note 12 at 106-108.

as something applicable to brownfields in the right circumstances. At least in the case of brownfields, the *WA*, the *SCA*, and the *PHA* cover some of the same ground as *EPEA*, but at the cost of administrative efficiency as local or municipal authorities and Alberta Health Services enter the field.

Second, federal authorities have sought to limit their direct role to those brownfields found on federal lands. Nevertheless, *CEPA* extends federal authority over the contaminants typically found at many brownfields through the regulation of toxic substances and their effects. Indirectly, federal authorities have also targeted brownfields through the financial support of some municipal initiatives, such as brownfield remediation and redevelopment projects. Here, the federal authorities can effectively supplement existing cleanup and redevelopment programs without entering the regulatory field. This is encouraging and may lead to less conflict and uncertainty.

Third, and probably most significant, some municipalities have turned their attention to contamination problems through a broader interpretation of their public nuisance powers, or have targeted the cleanup of brownfields through area-wide redevelopment plans. These provide municipalities with the legislative authority to redevelop and revitalize whole communities and new funding powers to help finance these projects. Without funding from the federal government or new revenue streams, municipalities would not be able to cover the high cost of cleanup and redevelopment necessary to bring these communities back into productive use. There is still room for further municipal activity in Alberta under the power to pass bylaws for safety, health and welfare and under the authority to regulate public nuisances in the *MGA*. So far, there has been limited interest by municipalities to occupying this area despite overall public support for greater municipal action for environmental protection. However, as the federal and provincial authorities withdraw from the field, municipalities, who are closest to the problem and who stand to benefit most from cleanup and redevelopment, will likely be called upon to take on a more active role in addressing historic contamination problems. How it will all pan out is still unknown. At the present time, the whole area is in a state of considerable flux and the future shape of the regulatory system is unsettled.

### **3. Correcting the Market and the Regulatory Failures**

#### **3.1. Introduction**

Daniel Esty advances a useful framework for evaluating both the market and the regulatory system connected to the governance of environmental problems such as



brownfields.<sup>338</sup> In his view regulatory intervention is not necessary where markets are functioning properly, since much of the information gathering and processing burden, which currently falls to governmental authorities, can be shifted, at least in part, to the private sector.<sup>339</sup> So long as the market remains imperfect the hope of substituting market controls for regulatory restrictions remains unlikely, but perhaps “possible in the not-too-distant future.”<sup>340</sup> According to Esty, markets will operate more effectively when better information is made available to both regulators and the private sector, signalling a reduction in transaction costs. This will result in the free flow of brownfield lands on to the open market and require less regulatory intervention. Until these information gains are achieved the brownfield market failure will continue to demand strict regulatory rules and procedures. To achieve better regulation, Esty draws attention to three issues: (1) information and administrative shortcomings; (2) externalities and structural regulatory inadequacies; and (3) public choice failures.<sup>341</sup>

Whenever government actors move to occupy a field of activity, such as correcting the brownfield market failure, there is a risk that these efforts may go astray causing unintended consequences that aggravate the problem and in turn create greater uncertainty for the marketplace.<sup>342</sup> These unintended consequences include ambiguous legal liability,<sup>343</sup> the absence of identifiable and consistent cleanup standards,<sup>344</sup> and uncertain and inconsistent regulatory policies and approaches.<sup>345</sup> According to Esty, intervention may not correct the market failure because of a mismatch between government action and the nature of the problem.<sup>346</sup> From David Campbell’s perspective “[i]t is a cast of mind which moves from showing that the market is imperfect to thinking that regulation is better without joining up the dots.”<sup>347</sup> These unintended consequences

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<sup>338</sup> Daniel C Esty, “Toward Optimal Environmental Governance” (1999) 74 NYU L Rev 1495 at 1524-1528.

<sup>339</sup> *Ibid* at 1538-1539.

<sup>340</sup> *Ibid* at 1539.

<sup>341</sup> *Ibid* at 1509-1518.

<sup>342</sup> *Ibid* at 1508.

<sup>343</sup> Davis, *supra* note 168 at 9-10; and Kris Wernstedt, Peter B. Meyer, & Kristen R. Yount, “Insuring Redevelopment at Contaminated Urban Properties” (2003) 8 Public Works Mgmt & Pol’y 85 at 86.

<sup>344</sup> Davis, *ibid* at 10.

<sup>345</sup> Davis, *ibid* at 11-12 and Delcan, *supra* note 76 at 45.

<sup>346</sup> Esty, *supra* note 338 at 1511.

<sup>347</sup> David Campbell, “Of Coarse and Corn: A (Sort of) Defence of Private Nuisance” (2000) 63 Mod L Rev 197 at 201.

may arise because the problem, in whole or in part, falls outside the actual scope of the current legislation or beyond the supervision and reach of the regulators.<sup>348</sup>

Optimal environmental governance means minimizing the welfare losses associated with administrative, technical and information shortfalls, structural or institutional mismatches, and public choice failures.<sup>349</sup> It means not only the acknowledgement of the problem but also the adoption of a cohesive and coherent approach to correct them. As Esty notes, “[g]ood results depend on aligning market forces with environmental goals and achieving better-functioning regulatory regimes.”<sup>350</sup> “The challenge”, says Jodie Hierlmeier, “is to develop policies and programs that eliminate or reduce [the] barriers so as to increase the rate of redevelopment for brownfield sites.”<sup>351</sup> The development of evaluative criteria based on an understanding of the shortcomings and failures of the current regulatory system is an important first step toward better regulatory results on the ground.

### **3.2. Better Information and Streamlined Administrative Action**

#### **3.2.1. Information and Capacity Building Strategies**

Research indicates that “the most sweeping and serious flaws” of the environmental decision-making process stems from data gaps and technical shortcomings.<sup>352</sup> They can lead to important problems in the regulatory system, such as the lack of the professional and technical knowledge needed to effectively address brownfields and the information disparity between vendors and purchasers that results in too few sales. Information and administrative shortfalls may also lead to poor decision-making by legislators, regulators and private actors.<sup>353</sup>

If better information can reduce policy failures, lower transaction costs, and allow the adoption of more effective market-based regulatory tools, an effective brownfield framework must emphasize the better collection and use of information. More specifically, this requires knowledge of past commercial and industrial uses of the land. It also requires a scientific or technical understanding of the nature and toxicity of the chemicals used by past commercial and industrial activities conducted on the land. This has the added benefit that as private actors become more informed, the level of

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<sup>348</sup> Esty, *supra* note 338 at 1511-1512.

<sup>349</sup> Esty, *ibid* at 1498.

<sup>350</sup> *Ibid* at 1497.

<sup>351</sup> Hierlmeier, *supra* note 12 at 17.

<sup>352</sup> Esty, *supra* note 338 at 1542.

<sup>353</sup> See comments: RCI Consulting, *supra* note 9 at 38.

government involvement in the market can be reduced.<sup>354</sup>

### 3.2.1.1. *Capacity Building: Better Information*

Better information is often seen as an essential element to any effective brownfield strategy.<sup>355</sup> For one, the lack of accurate information on where many brownfields are located hinders any effective cleanup and remediation strategy.<sup>356</sup> Before any steps can realistically be taken to remedy the brownfield problem, government authorities, local planners, policymakers, private parties, and researchers must know of their presence, location and characteristics.<sup>357</sup> If brownfields pose a serious enough risk to human health, safety and the environment to demand collective action, then the lack of adequate detection efforts is simply unacceptable. The self-reporting methods used by many provinces including Alberta places too low a priority on detection.<sup>358</sup>

As noted earlier, the retreat by Alberta Environment from the contaminated sites provisions of *EPEA* means that the regulatory net is aimed at catching toxic releases with an immediate risk to human health, safety and the environment. Under section 110 of *EPEA*, the duty to report lies with the polluter.<sup>359</sup> A landowner has no duty to report. For example, in the case of an abandoned gas station, the polluter may not have conducted any activities at the site for decades. Unless hydrocarbons or other toxic substances are presently leaching into neighbouring properties, the risk to human health, safety and the environment is more or less managed if the contamination remains buried, or where contaminants are migrating off-site, only where vapours percolate up through the basements of adjoining homes or offices, or where hydrocarbons and other toxic substances pollute a water source. So long as the site, and any adjoining properties, remain undisturbed, the contamination does not pose an immediate danger to health, safety or the environment. In such instances, the identification of historic contamination, which lacks the immediacy of a current spill, becomes a second order priority for regulators.

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<sup>354</sup> Dietrich Earnhart, "Liability for Past Contamination and Privatization" (2004) 29 *Env't & Res Econ* 97 at 119.

<sup>355</sup> See: C De Sousa, "Contaminated Sites: The Canadian Situation in an International Context" (2001) 62 *J Envtl Mgmt* 131 at 137 [De Sousa, "Contaminated Sites"].

<sup>356</sup> RCI Consulting, *supra* note 9 at 30.

<sup>357</sup> *Ibid* at 31.

<sup>358</sup> Most provinces continue to rely on self-reporting of past contamination by landowners and polluters. Where polluters fail to report contamination, provincial authorities have only anecdotal evidence based only on past uses of the land.

<sup>359</sup> *EPEA*, s 110.

Brownfields will continue to fall between the cracks since a landowner has no positive obligation or incentive to investigate historic contamination and a dishonest past polluter may hide a toxic release for years or even decades. Even the registry systems currently used in some provinces have been criticized for the lack of consistency in how data is collected, what constitutes a contaminated site, and whether the information is publicly available.<sup>360</sup> So far, information on the extent of the brownfield problem remains sporadic.<sup>361</sup> Information on brownfields is not consistently collected, compiled, or made publicly available. Thus, targeted information on the nature and extent of the brownfield problem is a necessary first step to effective regulation.

Second, many potential developers avoid brownfields because they lack the knowledge and expertise to take on a project.<sup>362</sup> While many developers still fear the financial commitment and liability risks associated with brownfields, developers are not a monolithic group. Experience varies among developers. Developers who have prior experience with contaminated sites view contamination as a lesser barrier to redevelopment than those with little experience.<sup>363</sup> This is encouraging news since it indicates that the information barrier can be breached when developers are better informed and educated about the actual risks. To narrow the information gap Dan Hara calls for programs designed to generate better public understanding about brownfields.<sup>364</sup> Such programs can help developers identify potential risks associated with brownfield projects.

Third, better sources of information can also help match potential purchasers with landowners, since an informed purchaser will have some pre-closing knowledge about the issues that may impact a development project for a parcel of land.<sup>365</sup> The need to provide potential purchasers with information on the state of the land is often seen as a rationale for the development of site profile and registry systems. In the long-run a database of site conditions may prove to be a more cost effective approach to lowering transaction costs than other strategies such as liability relief or government financial incentives.

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<sup>360</sup> De Sousa, “Contaminated Sites”, *supra* note 355 at 137.

<sup>361</sup> Christopher A De Sousa, “Brownfield Redevelopment in Canadian Cities: Justifications and Directions” in Abdel-Aziz & Chalifour, *supra* note 24 2-1 at §2.7.

<sup>362</sup> Morassutti et al, *supra* note 289 at §8.1.

<sup>363</sup> Siikamäki & Wernstedt, *supra* note 24 at 581.

<sup>364</sup> Hara, “Correcting Market Failures”, *supra* note 24 at §§10.139-10.147. See also: CM Morgan & PA Brown, “Public policies that foster contaminated land recycling – expanding the horizon” in CA Brebbia, D Almorza & H Klapperich, eds, *Brownfield Sites: Assessment, Rehabilitation and Development* (Southampton, UK: WIT Press, 2002) 397 at 399.

<sup>365</sup> RCI Consulting, *supra* note 9 at 31.

Finally, more accurate information helps municipalities and regional planning authorities assess what resources are needed when embarking on a revitalization or redevelopment project.<sup>366</sup> An understanding of the size and nature of a brownfield problem make it possible to assess how the problem may impact the community and what obstacles stand in the way of a proposed community revitalization program. First, empirical research indicates that there may be more community support for residential over commercial and for commercial over industrial projects.<sup>367</sup> According to Marie Howland, residents may prefer “recreational, cultural, and community facilities, followed by residential projects”, over industrial and commercial projects because of fears of gentrification, or they may demand cleanup to higher standards than that necessary for the intended use of the land.<sup>368</sup> Knowledge of community preferences is crucial for land planners, not only to assess the pulse of the community when planning a project but to design programs to alleviate unwarranted community fears. Second, in many cases contamination is only one aspect of the overall land planning problem. Empirical research shows that the lack of adequate infrastructure may be a more significant barrier to redevelopment than the fact of contamination.<sup>369</sup> Besides the potential for liability, developers consider other economic factors such as the cost of construction, the business opportunity, and the overall suitability of the site when approaching a brownfield.<sup>370</sup> Experience shows that a “one size fits all” approach to brownfields is unlikely to work for all problems in all communities.<sup>371</sup> Thus, land planners must carefully consider how brownfields fit into the larger redevelopment and revitalization plan for a community. Better information on the brownfields adversely affecting a community can lead to better public choices and more meaningful public participation in the process.

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<sup>366</sup> *Ibid.*

<sup>367</sup> Siikamäki & Wernstedt, *supra* note 24 at 584. See also: Marie Howland, “Private Initiative and Public Responsibility for the Redevelopment of Industrial Brownfields: Three Baltimore Case Studies” (2003) 17 *Econ. Dev. Q.* 367 at 379.

<sup>368</sup> Marie Howland, “Employment Effects of Brownfield Redevelopment: What Do We Know from the Literature?” (2007) 22 *J Planning Lit* 91 at 102.

<sup>369</sup> Marie Howland, “The Role of Contamination in Central City Industrial Decline” (2004) 18 *Econ. Dev. Q.* 207 at 217-218 [Howland, “The Role of Contamination”] and Gorovitz Robertson, *supra* note 3 at 1091-1095.

<sup>370</sup> Lynn Singband, “Brownfield Redevelopment Legislation: Too Little, But Never Too Late” (2003) 14 *Fordham Envtl LJ* 313 at 314.

<sup>371</sup> Alberto Longo & Anna Alberini, “What are the Effects of Contamination Risks on Commercial and Industrial Properties? Evidence from Baltimore, Maryland” (2006) 49 *J Envtl Planning & Mgmt* 713 at 733.

### 3.2.1.2. Capacity Building: Regulators

One identified information barrier has been the sparse toxicological research and data available, and the associated reluctance on the part of regulators to accept the data when it is available, leading parties to continue to rely too much on the traditional dig and dump approach.<sup>372</sup> Despite a general recognition of risk-based technologies as an acceptable alternative to dig and dump cleanup, there continues to be a bias against the use of risk management techniques.<sup>373</sup> This seems to stem, at least in part, from the general lack of information on alternative technologies and of their successful use in actual remediation projects. To remedy this situation RCI Consulting calls for easily accessible and understandable information on the cost-benefit and limitations attached to alternative technologies.<sup>374</sup> So far, reliable sources remain limited. In the U.S., the Environmental Protection Agency (EPA) funds the development of new technologies, actively promotes new technologies, and provides resources and guides for their use to the public.<sup>375</sup> Canadian approaches, on the other hand, are characterized by a general lack of government support for new technologies, beginning with a failure to fund research and extending to a lack of support for research initiatives.<sup>376</sup> To this end, the NRTEE calls for a fast-track government approval program to demonstrate the availability of alternative technologies on designated brownfield sites.<sup>377</sup>

Today, risk assessment and risk management are accepted industry practices.<sup>378</sup> In the past decade, an emerging class of qualified professionals with the ability to deal with contamination issues has emerged to meet the challenges of remediation. However, the expertise of governmental regulators has not kept pace, even while the government places higher standards on those involved in remediation.<sup>379</sup> This lack of expertise is aggravated by stricter regulatory requirements and more complicated, risk-based cleanup plans. As a result, regulators are frequently unable to keep up with the demand for regulatory approvals. This has led to a considerable delay in the regulatory approval process.<sup>380</sup>

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<sup>372</sup> RCI Consulting, *supra* note 9 at 29.

<sup>373</sup> *Ibid.*

<sup>374</sup> *Ibid.*

<sup>375</sup> *Ibid.*

<sup>376</sup> *Ibid* at 30.

<sup>377</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 31-32.

<sup>378</sup> RCI Consulting, *supra* note 9 at 14.

<sup>379</sup> Many provinces require that those involved in remediation be qualified experts.

<sup>380</sup> RCI Consulting, *supra* note 9 at 14. According to RCI Consulting at 14 administrative delays can take from several months to over a year.

If governmental authorities are serious about adopting risk assessment and risk management techniques to cleanup brownfields, adequate resources need to be directed at the problem. Project assessment requires “intensive, recurrent, and costly review of voluminous documentation.”<sup>381</sup> In the U.S., some states have dedicated staff available to assist in site investigations and the preparation of remedial action plans and some states offer these services to municipal planners.<sup>382</sup> The stricter regulatory guidelines recently adopted by many provinces, combined with a general lack of expertise among regulators, will likely lead to risk-based approaches being used less often.<sup>383</sup> In some cases, new technologies, such as bioremediation, cannot be used because they require a considerable lead time to avoid undue delays when implemented.<sup>384</sup>

To further complicate the situation, some experts, particularly those hired on by financial institutions, may operate less as brownfield project facilitators and more as risk assessment and liability avoidance experts.<sup>385</sup> This can only breed suspicion between regulators and stakeholders and increase the information asymmetries that slow down the regulatory process.<sup>386</sup>

Risk avoidance strategies are a particularly pernicious problem. They can lead to a regulatory paralysis that affects not only private actors but also regulators. In some cases, the resistance on the part of regulators to investigate contamination or to enforce the rules may be attributable in part to their own risk avoidance strategies.<sup>387</sup> Even regulators worry that the decisions they make today may have serious consequences for the future. Stronger leadership from governmental authorities may be necessary to reduce such regulatory inefficiencies. This can be seen, for example, in the regulatory retreat of Alberta Environment from the contaminated sites provisions of *EPEA*. Where regulators resist legislative goals, stronger instructions to the regulator may be necessary to ensure that those goals are achieved as intended by the legislator.<sup>388</sup>

To avoid conflict and delay in response to brownfields, some commentators call for greater cooperation between regulators and stakeholders. One such program is the

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<sup>381</sup> Buzbee, “Remembering Repose”, *supra* note 167 at 90.

<sup>382</sup> RCI Consulting, *supra* note 9 at 14.

<sup>383</sup> *Ibid* at 17-18.

<sup>384</sup> *Ibid* at 30.

<sup>385</sup> *Ibid* at 20.

<sup>386</sup> William Buzbee notes that regulators such as the EPA have long-held suspicions of industry motives. This makes it difficult to foster an atmosphere that is conducive to public-private partnerships in remediation. See: Buzbee, “Remembering Repose”, *supra* note 167 at 95.

<sup>387</sup> William Buzbee finds that regulators resist voluntary cleanup programs partly from a fear of risk. The same logic would apply to the adoption of risk-based approaches to cleanup. See: *ibid* at 92.

<sup>388</sup> *Ibid* at 56.

Atlantic Partnership in RBCA Implementation (Atlantic PIRI). The Atlantic PIRI committee draws regulators and industry stakeholders together in a non-confrontational manner to identify problems and discuss issues, approaches and needs. RCI Consulting sees this as a model for other provinces.<sup>389</sup> Efforts to emulate this program have led to the creation of the national Canadian Brownfield Network. This is in line with the recommendations of the NRTEE, which calls for the establishment of a National Brownfield Association to coordinate efforts to build capacity in Canada.<sup>390</sup> This approach brings both regulators and stakeholders together but stops short of recommending a form of strategic partnership between regulators and stakeholders to address the problem of brownfields. This approach would be useful in Alberta.

### 3.2.1.3. Capacity Building: Public Participation

There are a number of systemic problems generated by the regulatory system that greater public participation seeks to cure. These include: (1) a general lack of knowledge about environmental issues; (2) the inadequate consideration of public values and preferences by policymakers; (3) an opportunity loss when stakeholders are not consulted; (4) a general disbelief that regulators will adequately protect human health and the environment; and (5) the perpetuation of a culture of conflict.<sup>391</sup> To reduce the efficiency losses to the system, the NRTEE calls for an integrated approach to communication and education in order to help raise general public awareness of the issues.<sup>392</sup> In addition to education, other commentators have identified at least five other social goals of public participation: (1) to incorporate public values, assumptions and preferences into the decision-making process; (2) to improve the substantive quality of decisions; (3) to foster trust in institutions; (4) to reduce conflict among stakeholders; and (5) to achieve cost-effectiveness.<sup>393</sup>

Public participation is considered to be critical to a successful brownfield framework, not only because it allays community fears about brownfield redevelopment and the risk of exposure to toxic substances, but also because brownfield programs draw on limited public resources to achieve their ends.<sup>394</sup> Participation is often seen as an essential pillar of environmental justice and sustainability.<sup>395</sup> Some cleanup plans may face considerable

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<sup>389</sup> RCI Consulting, *supra* note 9 at 19.

<sup>390</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 31.

<sup>391</sup> Thomas C Beierle, *Public Participation in Environmental Decisions: An Evaluation Framework Using Social Goals*, Discussion Paper 99-06 (Washington, DC: Resources for the Future, 1998) at 3.

<sup>392</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 32.

<sup>393</sup> Beierle, *supra* note 391 at 3-9.

<sup>394</sup> See: McCarthy, *supra* note 18 at 211-215.

<sup>395</sup> See generally: Beierle, *supra* note 391.



public resistance from local community groups.<sup>396</sup> This can add costs and delays to a project. Since regulators tend to be responsive to the demands of local community groups, this often results in stricter approvals for site cleanup and remediation that can scare off potential developers from taking on brownfield projects.<sup>397</sup> As John Dernbach and Scott Bernstein note, a policy for sustainable development calls for collaborative governance in both the development and the implementation of the law.<sup>398</sup> For a brownfield project to be successful, it becomes essential that the local community is on-side with the project.

Currently in Alberta, there is no mechanism for members of the public to designate a site as a contaminated site under *EPEA*, or for the public to participate in the decision-making process for the monitoring or the cleanup of the site, under either federal or provincial legislation. Provisions for public participation are found under *CEPA*, but they are limited to challenges to the actions of federal regulators.<sup>399</sup> However, members of the public may influence the redevelopment of a brownfield as a matter of land-use planning through both *EPEA* and the *Canada Environmental Assessment Act*, or as a matter of municipal land-use planning. The problem with this approach always has to do with standing to challenge administrative decisions as a matter of a private prosecution, or even before that, the right to participate in the drafting of the terms for any proposed redevelopment program. Thus, for there to be any meaningful public participation in the brownfield context there needs to be a new mechanism for stakeholder engagement, one that does not currently exist in the legislation.

### **3.2.2. Streamlined Administrative Action**

Considerable progress has been made to codify remediation standards and to establish protocols for cleanup at brownfield sites.<sup>400</sup> This has led to the development of a three

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<sup>396</sup> Morassutti et al, *supra* note 289 at §8.9; Gorovitz Robertson, *supra* note 3 at 1090-1091; and Davis, *supra* note 168 at 12.

<sup>397</sup> In the case of the EPA's response to hazardous waste sites, empirical research indicates that health protective remedies are more likely to be selected by the regulator when there is active local community group involvement, and that this responsiveness to community action trumps industry or political factors. See: Dorothy M Daley, "Citizen Groups and Scientific Decisionmaking: Does Public Participation Influence Environmental Outcomes?" (2007) 26 J Pol'y Analysis Mgmt 349 at 363. While the activities of environmental groups have a positive influence on public funding of cleanup efforts, they have virtually no impact on private investment, see: Bruce A Williams & Alberta R Matheny, "Testing Theories of Social Regulation: Hazardous Waste Regulation in the American States" (1984) 46 J Politics 428 at 452-453.

<sup>398</sup> See: John C Dernbach & Scott Bernstein, "Pursuing Sustainable Communities: Looking Back, Looking Forward" (2003) 35 Urb Law 495 at 519.

<sup>399</sup> *CEPA*, Part 2.

<sup>400</sup> In Alberta, for example, as noted in Section 3 of this thesis, cleanup standards can be found in the Tier 1 and 2 soil and groundwater remediation guidelines, see: Alberta Environment, *Alberta Tier 1*, *supra*

tiered system involving (1) a generic cleanup to regulatory standards; (2) a site-specific cleanup that considers exposure pathways; and (3) a risk-based approach that limits exposure, but does not seek to eliminate it, and that requires a long-term management plan.<sup>401</sup> Some provinces, such as British Columbia, also provide specific guidelines for vendors, purchasers, developers, and lenders to alleviate liability concerns among those groups.<sup>402</sup> That is not the case in Alberta.

The importance of remediation standards should not be underestimated. Guidelines serve an important role in the market by setting the “price” of doing business for the private sector.<sup>403</sup> It signals the market as to what precautions are necessary to avoid harm and what conduct is expected.<sup>404</sup> Remediation standards assist developers in assessing the potential costs of a project.

Remediation guidelines provide for some flexibility. This is particularly important when cleanup is highly complex or costly and generic cleanup is not feasible.<sup>405</sup> In those cases, the regulator may relax cleanup standards.<sup>406</sup> This regulatory flexibility is essential to a well-working system. It allows developers to assess the cleanup costs associated with an intended future use of the land, while at the same time permitting regulators to take into account the risk a project poses to human health and the environment. Flexibility represents a trade off between health and safety goals and economic development goals.<sup>407</sup>

Flexibility comes with its own set of problems. Without clear rules a vendor or a purchaser can only speculate as to the prospective cost of their remediation efforts. They

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note 58, and Alberta Environment, *Alberta Tier 2*, *supra* note 204. Similar guidelines exist in all other provinces and territories.

<sup>401</sup> Alberta Environment, *Alberta Tier 1*, *ibid* at 1.

<sup>402</sup> See: British Columbia, Ministry of Environment, “9 Facts on Contaminated Sites: Highlights for Developers” (January 2006); “10 Facts on Contaminated Sites: Highlights for Lenders” (August 2005); “11 Facts on Contaminated Sites: Highlights for Realtors, Property Vendors, and Purchasers” (August 2005); and 17 Facts on Contaminated Sites: Remediation Liability and Insurers, Lenders, Receivers, Sureties, and Trustees” (August 2005).

<sup>403</sup> Dale A Nance, “Guidance Rules and Enforcement Rules: A Better View of the Cathedral” (1997) 83 Va L Rev 837 at 875.

<sup>404</sup> Sébastien Rouillon, “Safety regulation vs Liability with heterogeneous probabilities of suit” (2008) 28 Intl Rev L & Econ 133 at 134.

<sup>405</sup> Buzbee, “Remembering Repose”, *supra* note 167 at 37-47.

<sup>406</sup> See: *ibid* at 50 and James W Creenan & John Q Lewis, “Pennsylvania’s Land Recycling Program: Solving the Brownfields Problem with Remediation Standards and Limited Liability” (1996) 14 Duq L Rev 661 at 662.

<sup>407</sup> John S Applegate, “Risk Assessment, Redevelopment, and Environmental Justice: Evaluating the Brownfields Bargain” (1997) 13 J Nat Res & Envntl L 243 at 246.

won't know the actual costs until the regulator approves a remediation plan. This added risk can tie up the land.<sup>408</sup> Vendors may be discouraged from undertaking cleanup efforts and purchasers may avoid acquiring brownfield sites, leading to the very hold out problem and adverse selection problem that lead to abandonment in the first place. Even if the sale goes ahead, both the vendor and the purchaser will tend to set funds aside to address any potential risks. This may divert limited resources from the project.<sup>409</sup> For the regulator, flexible rules can raise both the costs of administering the system and the costs of enforcing the rules. To assess risk, the regulator needs to hire staff and allocate resources to that task.

Finding the correct balance between flexibility and certainty is crucial. At an informational level, more streamlining of cleanup procedures and greater clarity in the risk assessment and management process should go a long way in reducing some of this uncertainty.

Some commentators also argue that varying regulatory standards between levels of government presents another potential roadblock.<sup>410</sup> They call for more streamlined planning and approvals. In order to streamline them, Ontario has delegated their authority to municipalities within the local land-use planning process.<sup>411</sup> This makes sense. Most municipalities require environmental site assessments before approving any development where there is a risk to human health and the environment from past contamination.<sup>412</sup> A similar approach could be adopted in Alberta.

This downloading of authority to municipalities is not without its challenges. Municipalities often have the most stringent remediation requirements, sometimes demanding even more than the numerical standards set out by provincial authorities.<sup>413</sup> In some cases municipalities will not accept risk-based approaches the cleanup.<sup>414</sup> Moreover, the planning delays that come from dealing with a more restrictive regulator add to the overall costs of a project.

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<sup>408</sup> Gorovitz Robertson, *supra* note 3 at 1088.

<sup>409</sup> Buzbee, "Remembering Repose", *supra* note 167 at 51.

<sup>410</sup> RCI Consulting, *supra* note 9 at 15.

<sup>411</sup> *Ibid* at 11.

<sup>412</sup> See, for example: Calgary, *Land Use Bylaw*, ss 28(3) and 38(1)(d).

<sup>413</sup> RCI Consulting, *supra* note 9 at 32 & 34.

<sup>414</sup> *Ibid* at 32 & 35. According to RCI Consulting this is partially because Canadian municipalities have not embraced institutional controls like their U.S. counterparts. Institutional controls are a system of land use restrictions and engineering controls designed to prevent unwanted exposure to contaminants that remain after risk-based cleanup, see: *ibid* at 32.

To ease the planning and approvals process, RCI Consulting calls for municipalities to provide developers with “clear, consistent, standardized and streamlined policies” that will better integrate the planning approval process with the environmental approval process.<sup>415</sup>

Recent efforts by municipalities have led to cooperative approaches to redevelopment that create an atmosphere of “facilitation” rather than of “regulation.”<sup>416</sup> As municipalities become financial stakeholders in brownfield projects, either through financial incentives or public-private partnerships with developers, they become invested in a more expedited planning approval process. They also desire the facilitation of public consultation and the efficient resolution of disputes.<sup>417</sup> This is true of a number of brownfield projects such as the Currie Barracks redevelopment project in Calgary, which evolved with considerable municipal support and after years of public consultation.<sup>418</sup> In cases such as Currie Barracks, the project highlights the environmental efforts of community leaders to bring about more sustainable development, one that encouraged a cooperative approach.

### 3.3. Correcting Structural Inadequacies

While uncertain liability is one factor that contributes to the market failure it is hardly the only one. The brownfield problem is far more complex than that. There are a number of interrelated, complex issues that prevent blighted lands from re-entering the real estate market. These include site characteristics, infrastructure problems, zoning issues, tax rates, the skill level of the current labour force, patterns of crime and poverty in the community, and other non-environmental factors related to the property or the surrounding neighbourhood.<sup>419</sup> Any strategy that fails to consider these factors is

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<sup>415</sup> *Ibid* at 34.

<sup>416</sup> *Ibid* at 33.

<sup>417</sup> *Ibid* at 33.

<sup>418</sup> The Currie Barracks brownfield project is the first community development project in Canada to receive LEED Gold environmental certification, see: Canada Lands Company, News Release and Backgrounder, “Calgary’s Currie Barracks First in Canada to Receive Top Environmental Certification” (27 October 2008).

<sup>419</sup> Gorovitz Robertson, *supra* note 3 at 1091-1095. See also: Howland, “The Role of Contamination”, *supra* note 369 at 218 (road access, infrastructure, current land use, and hold outs); JR Rocco, LJ Wilson & RB Gilbert, “Integrated decisionmaking for brownfields properties” in CA Brebbia, D Almorza & H Klapperich, eds, *Brownfield Sites: Assessment, Rehabilitation and Development* (Southampton, UK: WIT Press, 2002) 317 at 317-318 (economic condition of site and neighbourhood); Robert A Simons, *Turning Brownfields into Greenbacks: Developing and Financing Environmentally Contaminated Urban Real Estate* (Washington, DC: Urban Land Institute, 1998) at 9-12 (lot size, road access, and perceptions of crime and labour force); and Longo & Alberini, *supra* note 371 at 733 (market demand).

probably short-sighted. As many brownfields exist in older neighbourhoods, a program of neighbourhood redevelopment and revitalization can deal with all of these issues while working toward the cleanup of historic contamination.

### **3.3.1. Reintegrating Property Rights to Correct the Anticommons Problem**

The “hold out” problem presents perhaps the greatest challenge for policymakers in correcting the brownfield market failure. The hold out problem occurs whenever landowners “mothball” brownfield sites that could be returned to productive reuse and effectively keep economically viable land off the market.<sup>420</sup> As a result, the scarce resource remains underutilized. In a competitive market, parties will normally trade their rights until one or more parties has sufficient authority to use or control the resource. But where competing property rights and high transaction costs, from hold outs, lead to market failure, government intervention may be necessary to correct the market and effectively bring the underutilized land back into productive reuse.<sup>421</sup> This is often referred to as the anticommons problem. This problem occurs whenever multiple parties can effectively exclude all others from using a scarce resource.<sup>422</sup> In the brownfield context, the anticommons problem may require that fragmented property rights in the land be reintegrated. This means not only the landowner, the developer, and the community, but also the fragmented rights of three levels of regulators, whose uncoordinated actions can effectively stop or delay a redevelopment project. According to Michael Heller, all the entitlements to the land should be placed in the hands of an assembler with the ability to use the land and who stands to receive the benefits that come from re-assembly.<sup>423</sup> This is the efficient solution to the type of gridlock Heller describes in his work. At its most basic, it means providing the party best positioned to cleanup and redevelop a brownfield, and most motivated to do so, with the effective authority to make cleanup and redevelopment happen. An assembler may be a private developer who wants to convert an abandoned warehouse, for example, to a mixed use commercial/residential

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<sup>420</sup> See: RCI Consulting, *supra* note 9 at 8; Michael J Gergen, “The Failed Promise of the “Polluter Pays” Principle: An Economic Analysis of Landowner Liability for Hazardous Waste” (1994) 69 NYU L Rev 624 at 671; and Hope Whitney, “Cities and Superfund: Encouraging Brownfield Redevelopment” (2003) 30 Ecol LQ 59 at 68-69.

<sup>421</sup> Michael Heller & Rick Hills, “Land Assembly Districts” (2008) 121 Harv L Rev 1465 at 1472-1474. Heller and Hills call for the use of Land Assembly Districts, as a limited form of eminent domain and as a fair and effective means for reassembling property in the case of “blighted” lands.

<sup>422</sup> See: Robert L Scharff, “A Common Tragedy: Condemnation and the Anticommons” (2007) Nat Resources J 165 at 166 and Michael A Heller, “The Tragedy of the Anticommons: Property in the Transition from Marx to Markets” (1998) 111 Harv L Rev 621 at 668 [Heller, “Tragedy of the Anticommons”].

<sup>423</sup> Heller, “Tragedy of the Anticommons”, *ibid* at 622-626.

building, a municipal authority looking to redevelop and revitalize an important inner city neighbourhood, or in some cases, a partnership of both a private developer and a municipal authority.

Government authorities may need to redistribute entitlements between parties in order to lower transaction costs and to bring efficiency back to the marketplace.<sup>424</sup> Government intervention may take the form of traditional command and control regulation, involving direct government intervention in the market, softer, market-based regulation that relies more heavily on private actors to correct the market, financial incentives that stimulate interest in brownfields from the private sector, or mandatory disclosure programs that seek to eliminate or reduce information asymmetries. The discussion that follows will point out some of the strengths and weaknesses of each form of intervention.

To determine which instrument produces the best result is a much more complex question. Under perfect textbook conditions with full information, where monitoring and enforcement are not an issue, any given set of regulatory tools can be equally effective in eliminating or reducing environmental externalities.<sup>425</sup> That is because when transaction costs are removed from the equation, any set of liability rules can produce efficient outcomes.<sup>426</sup> It is only when conditions are imperfect — such as in real world situations — that the choice of an instrument matters. In many cases, a combination of all of these measures, to some extent or another, will probably yield the best results.

### 3.3.1.1. *Command and Control with Sticks: Expropriation, ARPs and Recovery Actions*

One option for freeing up the market for brownfields would be for the government to act directly, moving brownfields out of the black hole of underutilization and putting them to better uses at the public expense. Government agents could simply expropriate the land necessary for community revitalization, clean it and seek recovery of their costs from the responsible parties, or transfer those lands to a land developer engaged in the redevelopment and revitalization of the entire community. Expropriation is frequently employed when governments acquire land for public infrastructure projects such as roads

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<sup>424</sup> In Thomas Lyon's opinion, environmental economics is a Hobbesian project, based on the premise that government is a Leviathan that coerces compliance with environmental regulations. Where there is perfect coercion there is perfect compliance. Thus, the entire field of environmental governance is a study of what happens when perfect coercion fails. See: Thomas P Lyon, "Environmental Governance: An Economic Perspective" in Magali Delmas & Oran Young, eds, *Governing the Environment: Interdisciplinary Perspectives* (Cambridge: Cambridge University Press) [forthcoming] at 4.

<sup>425</sup> *Ibid* at 5.

<sup>426</sup> Richard A Epstein, "A Clear View of The Cathedral: The Dominance of Property Rules" (1997) 106 Yale LJ 2091 at 2098 [Epstein, "Property Rules"].

and public transportation, utilities, and public works.<sup>427</sup> In those cases, government authorities redistribute property rights within the community for the public good.<sup>428</sup> Expropriation would be a quick and easy way for government authorities to take brownfields and redevelop them. However, as Richard Epstein points out, laws should protect private property rights unless they are working badly.<sup>429</sup> Efforts to coerce land sales, even for collective goals such as brownfield redevelopment, run counter to this common notion. Expropriation also raises questions of fairness and efficiency. In the case of tax motivated takings, where land is expropriated and passed on to a private developer who will, after redevelopment, raise the taxable value of the land, expropriation often leads to inefficient results.<sup>430</sup> The landowner is being asked to forego his/her entitlements, and more importantly, his/her right to participate in the future gains reaped from the reuse of his/her land.<sup>431</sup> It frequently leads to lengthy and costly disputes. Because coercive sales raise efficiency concerns, expropriation can only be justified by just compensation.<sup>432</sup> It requires striking a careful balance between the landowner's loss or forgone benefits, and the net gains to the community, and may only be justified when such actions are unavoidable and in the long-run for the benefit of society as a whole.<sup>433</sup>

To ensure that landowners more fully participate in the future gains from redevelopment, Michael Heller and Rick Hills recommend a limited form of expropriation, calling for Land Assembly Districts (LADs) under neighbourhood control that would permit stakeholder participation in the process.<sup>434</sup> LADs are something similar to condominium corporations. Interests and voting rights may vary under a LAD. Heller and Hills argue that assembling blighted lands through LADs avoids some of the

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<sup>427</sup> In Alberta, expropriations are conducted pursuant to the *Expropriation Act*, RSA 2000, c E-13. It permits a governmental authority to expropriate lands and to compensate the landowner.

<sup>428</sup> Frank I Michelman, "Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law" (1967) 80 Harv L Rev 1165 at 1193-1196.

<sup>429</sup> Epstein, "Property Rules", *supra* note 426 at 2094.

<sup>430</sup> Thomas J Miceli, Kathleen Segerson & CF Sirmans, "Tax Motivated Takings" (2008) 61 Nat'l Tax J 579 at 589. The authors define tax motivated taking at page 581 as a taking aimed at increasing the local tax base, instead of assembly for a public purpose.

<sup>431</sup> It is not merely a question of fair compensation, since a landowner is entitled to be paid the fair market value for the land upon the coerced sale. But expropriation may still under-compensate the landowner. Expropriation denies the landowner both participation in the assembly surplus (any future gains from redevelopment) and their subjective valuation of the land. See: Heller & Hills, *supra* note 421 at 1477-1482.

<sup>432</sup> Michelman, *supra* note 428 at 1167-1172.

<sup>433</sup> *Ibid* at 1234-1235.

<sup>434</sup> Heller & Hills, *supra* note 421 at 1488-1497.

unnecessary conflict that arises from coercive sales.<sup>435</sup> Under a LAD, a stakeholder such as the landowner has a say in the process and will participate in the future gains from redevelopment. This produces a fairer result for the landowner. LADs also provide for greater overall public participation and transparency in the process.<sup>436</sup> As such, LADs may offer a less coercive process than expropriation. Finally, LADs represent a viable form of cooperative environmental governance and public-private partnership, integrating the benefits of private investment with public influence over how those funds are used when addressing social policy or infrastructure needs.<sup>437</sup> Thus, LADs may be worth exploring in the context of ARPs. Both call for neighbourhood participation in the process. The downside of a LAD is the potential number of stakeholders involved in the process, each with varying interests and agendas, which if not carefully managed may lead to their own problems and potential paralysis.

ARPs, as instruments of municipal authorities, move away from the stakeholder form of corporation suggested by LADs, placing both the decision-making power and financial means within one assembler. They represent something along the spectrum from a highly centralized, command and control model to the highly decentralized, corporate stakeholder model suggested by LADs.

In Alberta, there are three CRPs established by specific regulations under the *MGA*: one in Calgary for the Rivers District and two in Edmonton for the Belvedere and the Quarters Downtown. CRPs are a special form of ARP with the addition of a special municipal tax levy. Each of these CRPs are established to revitalize a specific inner city neighbourhood in need of revitalization, and they grant the municipal authorities broad powers to prepare a community revitalization plan and implement the plan for the benefit of the community and allow municipal authorities the power to apply a tax levy on businesses and residents in the area to help finance the cost of the project over a number of years.<sup>438</sup> In Calgary, the Calgary Municipal Land Corporation (CMLC) was established in 2007 to implement the *Rivers District Revitalization Plan*, a project to redevelop and revitalize the East Village area of downtown Calgary.<sup>439</sup> The CMLC is a wholly owned subsidiary of the City of Calgary.<sup>440</sup> The East Village is only one of a

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<sup>435</sup> It does so by permitting landowners to participate in both the process and in any surplus that arises from redevelopment. See: *ibid* at 1497-1507.

<sup>436</sup> *Ibid* at 1489-1490.

<sup>437</sup> Tim Forsyth, "Cooperative Environmental Governance in North America and Asia" (Paper presented at the American Political Science Association meeting, Washington, DC, 30 August-3 September 2000) at 3.

<sup>438</sup> See, for example: *City of Calgary Rivers District Community Revitalization Levy Regulation*, *supra* note 330.

<sup>439</sup> Calgary Municipal Land Corporation (CMLC), "What is CMLC?" (Summer 2008) 1 CMLC in the East Village Issue 1.

<sup>440</sup> CMLC, *Business Plan 2007* (Calgary: CMLC, 2007) at 1 [CMLC, *Business Plan 2007*].



series of projects broadly outlined under the Centre City Plan, but placed wholly within the authority of the CMLC to manage on behalf of the City of Calgary.<sup>441</sup> The authority and financial resources to implement the City of Calgary's redevelopment plan for the Rivers District are vested in the CMLC, who acts as an assembler for re-assembling all the property rights in the East Village and for implementing the redevelopment and revitalization plan.<sup>442</sup> This includes both the cleanup and redevelopment of the brownfield sites found within the neighbourhood. The CMLC claims that in 2008, on 5<sup>th</sup> Avenue S.E. near the Simmons Building, they removed 59 million kilograms of contaminated soil as a part of their mandate to cleanup and redevelop the area.<sup>443</sup> In 2007, the estimated cost of environmental remediation in the East Village was \$26 million.<sup>444</sup>

The use of ARPs (or their equivalent in other jurisdictions) seems to be a common trend across Canada as a practical means of bundling the authority to implement community-wide redevelopment and revitalization programs (and implicitly, to bundle all the property rights in the ARP) within municipalities. Under ARPs municipalities have wide powers to designate a neighbourhood for rezoning and redevelopment.<sup>445</sup> In Alberta, these changes have meant only modest variations to the traditional subdivision and planning authority of municipal and local governments, but some rather profound changes to their financial powers. Funding for these plans come from traditional municipal sources, supplemented by new tax powers at the municipal level to finance redevelopment schemes. The City of Calgary established the CMLC in 2007.

However, municipal action is somewhat constrained by provincial restrictions that prevent municipalities from "bonusing" developers with direct grants, loans and other financial incentives.<sup>446</sup> Nevertheless, opinion has been generally positive about municipal activism in community revitalization and redevelopment, particularly for municipal efforts to move blighted lands to higher uses and to improve the liveability of urban neighbourhoods. Thus, it is likely that ARPs will continue to drive new brownfield programs.

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<sup>441</sup> The Centre City Plan comprises and consolidates a number of previous plans: Beltline Area Redevelopment Plan, East Village Area Redevelopment Plan, Chinatown Area Redevelopment Plan, Eau Claire Area Redevelopment Plan, West End Policy Consolidation, and Land Use Bylaw 2P80. See: City of Calgary, *Centre City Plan* (Calgary: City of Calgary, 2007) at 13-14.

<sup>442</sup> See: CMLC, Media Release, "Major land development deal to continue transformation of East Village" (5 October 2010).

<sup>443</sup> CMLC, "Environmental Clean-up" (Summer 2008) 1 CMLC in the East Village 3.

<sup>444</sup> CMLC, *Business Plan 2007*, *supra* note 440 at 43.

<sup>445</sup> Ontario, *A Practical Guide*, *supra* note 16 at 15.

<sup>446</sup> RCI Consulting, *supra* note 9 at 21.

The most obvious problem with ARPs as a tool for brownfield cleanup and redevelopment is that they are area-specific tools that focus on revitalizing a particular neighbourhood. They will only help resolve brownfields found within the geographic limits of the ARP, and only where it is expedient to do so for the overall neighbourhood revitalization plan. They cannot resolve those brownfields like abandoned gas station sites scattered around a city or current industrial parks, since the focus of ARPs are typically inner city neighbourhoods. Second, ARPs will help coordinate cleanup efforts and direct funds toward the remediation of historic contamination, but they will not resolve liability issues. ARPs do not address the question of ultimate responsibility for the cost of remediation, though much of the cost of remediation is borne by local taxpayers through municipal land taxes. The liability question still needs to be resolved through the operation of regulatory liability rules under provincial environmental protection legislation or third party liability to recover costs in tort law. Finally, ARPs do not reassemble fragmented administrative authority over historic contamination. A brownfield project still needs the approval of a number of regulators. There may be at least four regulators administering a number of overlapping laws that apply to a brownfield: Alberta Environment, Environment Canada, Alberta Health Services, and the municipal or local authority. ARPs may improve cooperation among regulators, which would reduce transaction costs, but not necessarily so. Each regulator has a different goal when viewing a brownfield problem and there is considerable room for disagreement as to the application of the rules. Thus, it is important that regulators coordinate their efforts.

At the other end of the spectrum are highly centralized, command and control models of regulation. In the U.S., *CERCLA* often proceeds on EPA directed cleanup with the government recovering its costs from responsible parties.<sup>447</sup> This takes the form of removal actions that deal with environmental emergencies and remedial actions that conduct long-term cleanup of listed sites.<sup>448</sup> Such an approach represents a highly centralized form of command and control structure for brownfields. In Alberta, cleanup could also be directed through a government agency and the costs recovered from responsible parties. Directed cleanup is contemplated within the cost recovery provisions found in all environmental protection statutes.<sup>449</sup> However, no Canadian jurisdiction

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<sup>447</sup> Stanley A Millan, "Contemporary *CERCLA*: Reversals of Fortune and Black Holes" (2005) *Fordham Env'tl L Rev* 183 at 185; Glass Geltman, *Recycling Land*, *supra* note 15 at 34; and United States, Government Accountability Office, *Superfund: Funding and Reported Costs of Enforcement and Administration Activities*, GAO-08-841R (Washington, DC: Government Accountability Office, 2004) at 1-3 [GAO, *Superfund*].

<sup>448</sup> GAO, *Superfund*, *ibid* at 1.

<sup>449</sup> In Alberta for example, the Director may recover the Crown's costs of carrying out the terms of an order against a person responsible as a personal debt or charge against the land, see: *EPEA*, ss 214, 245, & 248. See generally: Abdel-Aziz, *supra* note 79 at 5-1.

operates a Superfund program.<sup>450</sup> Funding a cleanup program is expensive. While a pollution tax on toxic products and industry is one funding option,<sup>451</sup> the U.S. Superfund experience indicates that a “shovels first” approach can seriously strain limited government resources.<sup>452</sup> The final bill for *CERCLA* cleanup may exceed \$650 billion.<sup>453</sup> While the bill would likely be substantially lower in Alberta, without federal funding to seed such a program it is not likely to be effective at cleaning up enough projects to make it worthwhile. Even the limited Alberta LUST program was terminated early, not from the lack of need, but from a lack of funding.<sup>454</sup>

Capital intensive expropriation and cleanup programs involve high sunk costs. Beyond the administrative and legal costs associated with coercive sales, governments must still compensate the landowner fairly for the forced sale.<sup>455</sup> Disputes over valuation can drag on for years, sapping government resources and misaligning government priorities. This is precisely the issue addressed with the WestLRT project in Calgary. In addition, the high costs of cleanup are no less daunting for governments than for private parties. Whether government authorities expropriate land or engage in cleanup and cost recovery, or some mixture of the two, the initial capital outlay for site assessment alone will draw heavily on limited government resources. In the U.S. the costs of site assessment can range from \$2,500 to \$30,000 per site and cleanup can range anywhere

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<sup>450</sup> However, the BC Advisory Panel’s approach seems to recommend an independent, *CERCLA*-like structure for administering cleanup and for funding projects, see: BC Advisory Panel, *Final Report, supra* note 96 at 131-146.

<sup>451</sup> Until 1995 part of the funding for the Superfund came from a fee charged on the purchase of chemicals and petroleum products as well as a corporate environmental levy on large companies. It accounted for \$1.5 billion in revenue until 1995 when the tax was scraped, see: Stefanie Sommers, “The Brownfield Problem: Liability for Lenders, Owners, and Developers in Canada and the United States” (2008) 19 *Colo J Int’l Env’t L & Pol’y* 259 at 266-267.

<sup>452</sup> See: Scott H Segal, “Nibbling at the Edges? An Overview of Possible Superfund Reform in the 103<sup>rd</sup> Congress” (1993) 23 *S B Tex Env’t LJ* 181 at 181. Superfund was originally seeded with \$1.6 billion, see: S Walker, “Restoration Principles and Criteria: Superfund Program Policy for Cleanup at Radiation Contamination Sites” in Malgorzata K Sneve & Mikhail F Kiselevo, eds, *Challenges in Radiation Protection and Nuclear Safety Regulation of the Nuclear Legacy* (Dordrecht, NL: Springer, 2008) 175 at 177. By 1997 the fund had reach a peak of \$4.7 billion, see: GAO, *Superfund, supra* note 447 at 8.

<sup>453</sup> NRTEE, *Cleaning Up the Past, supra* note 1 at A-19.

<sup>454</sup> Alberta Municipal Affairs, “Tank Site Remediation Program”, *supra* note 221.

<sup>455</sup> A fair valuation is not simply the fair market value of the land, but must also consider loss of business and opportunity, the cost of relocation, disturbance losses, and any reasonably held special attachment to the land. See, for example: *Expropriation Act, supra* note 427, ss 41-58.

from \$100,000 to a million.<sup>456</sup> RCI Consulting estimates that the cost of site assessment in Canada could exceed \$75,000 or even \$100,000 for large sites.<sup>457</sup>

A further disadvantage is the “legal rancor and high transaction costs” Michael Gergen describes.<sup>458</sup> Faced with the prospect of bearing some or all of the high cost of cleanup, parties who may bear some responsibility for contamination are encouraged to challenge the cost recovery process. As a result, *CERCLA* has been “mired in continuous conflict” since its inception.<sup>459</sup> The EPA spent \$170 million on enforcement in 2007 alone.<sup>460</sup> To avoid this, most commentators prefer softer regulatory mechanisms and market-based tools — more carrot than stick — which encourage private action and private investment over direct government intervention.

One advantage of the *CERCLA*-type model is its focus on liability. It permits the government authority or the regulator to impose liability on the polluter or any other party, such as a landowner, who is connected to the site if it will lead to the cleanup of the site and the recovery of the costs of cleanup. Another advantage of the *CERCLA*-type model is that it is not limited by the area specific restrictions of ARPs. It can be applied to any brownfield wherever it might be found, whether within a neighbourhood slated for redevelopment and revitalization or for a single gas station in a suburban neighbourhood.

In Canada, no current brownfield strategy proposes the use of expropriation or *CERCLA*-type cleanup and recovery programs.<sup>461</sup> With *CERCLA*'s mixed results and the voluminous debates over its effectiveness, the reticence by Canadian authorities to adopt coercive measures comes as no surprise.

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<sup>456</sup> G William Page & Harvey Z Rabinowitz, “Potential for Redevelopment of Contaminated Brownfield Sites” (1994) 8 *Econ Dev Q* 353 at 355.

<sup>457</sup> RCI Consulting, *supra* note 9 at 15.

<sup>458</sup> Gergen, *supra* note 420 at 628-629.

<sup>459</sup> Harold C Barnett, “Crimes against the Environment: Superfund Enforcement at Last” (1993) 525 *ANNALS, AAPSS* 199 at 121.

<sup>460</sup> This includes identification of responsible parties, negotiations, litigation, and enforcement expenditures, see: GAO, *Superfund*, *supra* note 447 at 13-14.

<sup>461</sup> While none of the commentators, panels and working groups expressly discount the idea of *CERCLA*-like cost recovery, none of them recommend it either. See generally: NRTEE, *Cleaning Up the Past*, *supra* note 1; CCME, *Recommended Principles*, *supra* note 2; BC Advisory Panel, *Final Report*, *supra* note 96; Law Reform Commission of Nova Scotia, *Final Report: Contaminated Sites in Nova Scotia* (Halifax: Law Reform Commission, 2009); NBBDWG, *Final Report*, *supra* note 22; Delcan, *supra* note 76; and Hierlmeier, *supra* note 12.

### 3.3.1.2. Market-Based Regulation with Carrots: An Example

There are a number of regulatory incentives, more in the way of carrots, that could be used to unlock hold outs and free up the marketplace without eroding government authority over brownfields. One such solution is the transferability of liability, a liability rule recommended by both the NRTEE and CCME.<sup>462</sup> Transferability rules allow a vendor to transfer liability along with the land upon the sale to a qualified purchaser. At its simplest, one vendor is released from liability in exchange for one purchaser who accepts responsibility. Since the vendor's future risk is eliminated or reduced, the vendor is encouraged to put brownfield lands back on the market.<sup>463</sup> The risk of liability for any past contamination, rather than evaporating with the release of the vendor, passes on to the purchaser.<sup>464</sup> Since liability passes to the party who stands to benefit from the future reuse of the land, transferability aligns well with the BPP.<sup>465</sup>

This differs from the current liability situation under *EPEA* and the *WA*. Under the substance release provisions of *EPEA* a polluter remains perpetually liable for any adverse effect and is obligated to report, monitor, and remediate the site.<sup>466</sup> Under the *WA* not only does a polluter have a positive obligation, but also a landowner has one as well.<sup>467</sup> If Alberta Environment uses the contaminated sites provisions of *EPEA* in the case of significant adverse effects, a landowner would also have perpetual liability for any past contamination that occurred while they were the landowner.<sup>468</sup> So long as the brownfield is not cleaned up, the polluter and the landowner will remain liable. Thus, if the purchaser fails to clean up the land to regulatory standards, the past polluter or landowner will still remain liable for any future government action with respect to the brownfield. While this may be fair and merely recognizes a polluter's continuing obligation to clean up their pollution, it makes it difficult for the vendor to assess their risk since part of that risk depends on the actions of an independent third party, the purchaser. A vendor is thereby not encouraged to transfer the land and may find it more beneficial to hold out.

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<sup>462</sup> NRTEE, *Cleaning Up the Past*, *ibid* at 25-26 and CCME, *Recommended Principles*, *ibid* at 11-14. See also: Department of Environment, New Brunswick, *A Comprehensive Plan for Brownfield Redevelopment in New Brunswick* (Fredericton: New Brunswick Department of Environment, 2008) at 4 and BC Advisory Panel, *Final Report*, *ibid* at 128-129.

<sup>463</sup> NRTEE, *Cleaning Up the Past*, *ibid* at 25.

<sup>464</sup> *Ibid*.

<sup>465</sup> See: Barbara Aretino et al, *Cost Sharing for Biodiversity Conservation: A Conceptual Framework* (Melbourne: Commonwealth of Australia, 2001) at 20.

<sup>466</sup> *EPEA*, ss 110 & 112.

<sup>467</sup> *Water (Ministerial) Regulation*, s 1(5).

<sup>468</sup> *EPEA*, s 128.

To ensure fairness, transferability should be limited and granted to only qualified purchasers. Imposed conditions on transferability may include that: (1) the transfer is made to an arm's length purchaser; (2) the vendor provides full and complete disclosure of all known aspects of the property, including its history and the nature and scope of any environmental issues; (3) the purchaser provides adequate financial assurances that remediation costs will be paid; (4) the purchaser agrees to remediate the land within a prescribed time frame; and (5) the purchaser has the capacity to carry out the required remediation and any regulatory requirements necessary to complete the remediation.<sup>469</sup>

One clear advantage for government authorities of transferability rules is they eliminate the sunk costs of acquiring brownfields and directly engaging in cleanup. This would reduce the regulator's costs of administering brownfield redevelopment. Transferability asks only that the legislator set out the rules and that the regulator monitor the activities of the market players. It lends itself to a more hands-off approach, less command-and-control and more market-based regulation.<sup>470</sup> A second advantage of transferability is that it allows the market to determine who bears the risk of environmental harm. If the vendor is to bear the risk, few transfers will occur and the risk will remain with the vendor. If, on the other hand, the purchaser is to bear the risk, it permits for the transfer of liability to the purchaser. In many cases the purchaser, as assembler, is in a better position to bear the risk, since it stands to gain from the redevelopment of the land. The higher-value user will hold both title and the risk. As a secondary effect, the purchaser will discount the purchase price to better reflect their expected risk.<sup>471</sup> The better the purchaser's information, the closer the purchase price will be to the actual risk. Since the risk is transferred in the purchase price, at least under conditions of full or near full disclosure, transferability is also fair.<sup>472</sup> Transferability is also efficient. The discounted purchase price encourages the vendor to spend on abatement measures to protect the value of their asset from the corrosive effect of pollution.<sup>473</sup> In this way, transferability rules take better advantage of market forces to encourage the cleanup by polluters and landowners.

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<sup>469</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 25-26 and CCME, *Recommended Principles*, *supra* note 2 at 11-14.

<sup>470</sup> Market-based regulation relies more heavily on operation of property rights and competitive markets to guide the behaviour of consumers and producers to allocate resources to the highest-valued use. See: Gerald P O'Driscoll Jr & Lee Hoskins, "The Case of Market-Based Regulation" (2006) 26 CATO J 469 at 469.

<sup>471</sup> Kathleen Segerson, "Legal Liability as an Environmental Policy Tool: Some Implications for Land Markets" (1997) 15 J Real Estate Finance & Econ 143 at 146 [Segerson, "Legal Liability"].

<sup>472</sup> Kathleen Segerson, "Property Transfers and Environmental Pollution: Incentive Effects of Alternative Policies" (1994) 70 Land Econ 261 at 270 [Segerson, "Property Transfers"].

<sup>473</sup> *Ibid* at 271.

Prospective purchasers in some provinces enjoy a limited exemption from responsibility for past contamination.<sup>474</sup> The landowner usually does not.<sup>475</sup> These exemptions shield a purchaser from the latent contamination that is attributable to a prior use of the land.<sup>476</sup> At first blush, the prospective purchaser exemption makes sense. It holds the polluter liable for any past contamination. But it is also the product of a developer-centred approach to brownfield law and policy; an approach, according to Joel Eisen, that may prove to be “inaccurate in whole or part” and may misalign priorities.<sup>477</sup> While reflecting the logic of the PPP, protection for the developer does not correct the market failure. Too few sales will continue to occur since there is only a limited incentive for the landowner to sell.<sup>478</sup> A prospective purchaser exemption creates too many purchasers but does nothing to encourage vendors to sell. There may be numerous developers willing to take on the risk of a brownfield, if they can get their hands on one. Landowners, as is their right as property owners, will continue to mothball brownfield sites and leave them abandoned or underutilized despite their economic potential.<sup>479</sup>

Transferability rules work in the opposite direction. They relieve the landowner of liability when the land is transferred to a qualified purchaser.<sup>480</sup> Transferring liability to the purchaser is also efficient if the vendor is more likely to be judgment-proof than the purchaser.<sup>481</sup> The party with the deeper pockets, the purchaser in this case, is also the party who assumes liability for cleanup. Independent of this, vendors are given an incentive to invest in abatement measures to prevent their land from being devalued.<sup>482</sup> It is in their best interests to spend on abatement to maximize their return on the sale of the land. Liability runs with the land. Since liability will pass to the purchaser, the landowner is encouraged to free up land for redevelopment. Transferability rules also reflect the

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<sup>474</sup> Exemptions are found in British Columbia, Saskatchewan, Manitoba, and Québec, see: *EMA*, s 46(1)(d); *EMPA*, s 2(w)(x); *CSRA*, s 9(3), and *EQA*, ss 31.43(1)-(2). The B.C. Advisory Panel goes further and calls for the use of formal agreements with the Minister to limit both civil and regulatory liability for prospective purchasers, see: BC Advisory Panel, *Final Report*, *supra* note 96 at 127-128.

<sup>475</sup> All provinces hold landowners and occupiers liable for toxic releases and contaminated sites, see: *EMA*, ss 45(1)(a)-(b); *EPEA*, s 107(1)(c); *EMPA*, s 2(w)(3); *CSRA*, ss 9(1)(a)-(b); Ontario *Environmental Protection Act*, ss 1(1), 7 & 8; *EQA*, s 25; *CEA*, s 5(3); Nova Scotia *Environment Act*, s 3(ak); Prince Edward Island *Environmental Protection Act*, s 7(1); and Newfoundland *Environmental Protection Act*, s 2(x).

<sup>476</sup> See, for example: *EMPA*, s 2(w)(x).

<sup>477</sup> Joel B Eisen, “Brownfields at 20: A Critical Reevaluation” (2007) 34 *Fordham Urb LJ* 721 at 731.

<sup>478</sup> Segerson, “Legal Liability”, *supra* note 471 at 150.

<sup>479</sup> See: Epstein, “Property Rules”, *supra* note 426 at 2094.

<sup>480</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 25-26.

<sup>481</sup> Segerson, “Property Transfers”, *supra* note 472 at 271.

<sup>482</sup> *Ibid.*

logic of the BPP in that the party who stands to benefit from the redevelopment, the prospective purchaser or developer, bears the risk.<sup>483</sup>

To some extent the apparent conflict between transferability rules and prospective purchaser exemptions demonstrates a tension that runs between the hold out problem and the judgment proof problem: who should pay for the costs of cleanup and how should the cleanup process proceed? Like other areas where these goals collide, there is room for much uncertainty for both regulators and market players. On the one side, uncertain liability prevents an efficient supply of brownfields as landowners hold out. Landowners are discouraged from putting brownfields on the market because, at least partially, they fear their potential liability for both past and future contamination.<sup>484</sup> On the other side, asymmetric information and the judgment proof problem discourages potential purchasers from entering the brownfield market, thus, leading to a less than efficient demand for brownfields.<sup>485</sup> Both the purchaser and the vendor lack enough information to fully assess their risk. In the face of these competing interests, the regulator must make a hard decision that will impact either the supply or the demand for brownfields. Without adequate information, the risk of future liability remains unknown, and without certainty as to which goals should take precedence, the transaction costs associated with the transfer of brownfield lands remain high and the market fails. It is this complexity in the system that has often stymied effective regulation.

Transferability rules and the potential purchaser exemption do not appear to be compatible. Someone needs to bear the risk even for the limited purpose of insurance. When both parties need to insure against the risk up to its full value, the duplication of insurance is inefficient.<sup>486</sup> When both the vendor and the purchaser bear the risk, transactions are deterred and the market fails.<sup>487</sup> A regulatory system that applies both transferability rules and a prospective purchaser exemption is bound to create more

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<sup>483</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 25-26.

<sup>484</sup> Segerson, "Legal Liability", *supra* note 471 at 150-151. A landowner may still bear some responsibility for post-sale contamination on lands it formerly owned where a subsequent owner is insolvent or cannot be found. In *Sarg Oils*, a past operator was held liable under an EPO for contamination that occurred after the land had been transferred to another, see: *Sarg Oils Ltd v Director of Land Reclamation, Alberta Environmental Protection* (11 May 1995) EAB Appeal No 94-011 at 9-11 [*Sarg Oils*]. Presumably, there would still need to be a nexus between the activities of the former landowner and the post-sale contamination. *Sarg Oils* involved the cleanup of well sites formerly operated by Sarg Oils Ltd, so the fair allocation of liability between Sarg Oil's earlier contamination and those of Sundial, the purchaser, was probably not possible on anything by an arbitrary basis.

<sup>485</sup> Segerson, "Legal Liability", *ibid*.

<sup>486</sup> In fact, when the risk of liability is uncertain both parties are likely to overinsure the risk of environmental harm, see generally, Earnhart, *supra* note 354 at 113-116.

<sup>487</sup> Howard F Chang & Hilary Sigman, "The effect of joint and several liability under superfund on brownfields" (2007) 27 *Intl Rev L & Econ* 363 at 392.



uncertainty than the rules are worth.<sup>488</sup> It would not eliminate the risk for either party, but merely increases the pool of potentially liable parties. It would not lead to the free flow of brownfield lands back to the market, and the partial liability created by each opposing set of rules would add to the uncertainty and the costs. The operation of both rules would simply raise transaction costs without any measurable benefit.

To provide a clear signal to the market, government authorities must carefully structure the regulatory rules governing brownfields. Rules that support important goals of the regulatory system may conflict, and the conflict may be intractable, forcing the regulator to make a hard decision as to which rules and goals take priority. The example of the transferability rules and the prospective purchaser exemption demonstrates one of these tensions. Great pains must be taken to ensure that those choices do not lead to a greater retreat away from a well-functioning marketplace.

### 3.3.1.3. *Golden Eggs: Incentive Instruments*

Incentive instruments are a form of market-based regulation that can be used as an alternative to the traditional command and control instruments.<sup>489</sup> They can take the form of classic Pigovian taxes and subsidies, or of permits.<sup>490</sup> Incentive instruments are found in all parts of the economy and pervade our everyday lives. They can, in the case of environmental protection, take on such forms as a tax at the pump on gasoline, a subsidy for the removal of underground storage tanks, and an emission permit for electrical utility providers. Market-based incentives are usually adopted because they are viewed as more cost-effective than command and control instruments.<sup>491</sup> Firms are likely to have better information than regulators about the cost and effectiveness of the available alternatives. Market-based incentives induce firms “to *find* the lowest cost” choice among the alternatives.<sup>492</sup> Command and control regulation, on the other hand, is popular because legislators can provide their constituents with some assurance that pollution will be dealt

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<sup>488</sup> Some jurisdictions appear to straddle the fence. See, for example: *EMA*, s 46(1)(d).

<sup>489</sup> Fullerton, *supra* note 191 at 224.

<sup>490</sup> *Ibid.* In classic Pigovian terms, the divergence between the socially desired condition and the actual behaviour of private parties in the marketplace may require state intervention. On Pigou, see generally: Frederico Aguilera Klink, “Pigou and Coase Reconsidered” (1994) 70 *Land Econ* 386 at 386-388 and Nahid Aslanbeigui & Steven G Medema, “Beyond the Dark Clouds: Pigou and Coase on Social Costs” (1998) 30 *Hist Pol Econ* 601 at 606-610.

<sup>491</sup> Fullerton, *supra* note 191 at 225.

<sup>492</sup> *Ibid* at 238.

with, instead of relying on firms to carry out those “welfare maximizing” behaviours on their own.<sup>493</sup>

In the case of past contamination, the literature recommends the use of financial incentives and subsidies as a means of encouraging firms to assume the costs of cleanup and remediation measures.<sup>494</sup> The NRTEE calls for the application of strategic public investment to address upfront costs.<sup>495</sup> This includes the tax deductibility of remediation costs, the removal of liens and tax arrears from qualifying brownfields, mortgage insurance, low-interest loans for qualifying brownfields, and grants to municipalities and non-profit organizations for qualifying brownfields.<sup>496</sup> Others call for the municipal gains from higher property taxes that will be collected from revitalized neighbourhoods to be ploughed back into redevelopment projects to help developers with up-front costs.<sup>497</sup> Scott Sherman suggests that the most effective forms of incentives would be property tax abatements and broad grants for site acquisition, remediation and redevelopment, while the least effective would be grants for site assessment only and low-interest loans.<sup>498</sup> The waiver or cancellation of development charges is particularly attractive because it represents a significant upfront cost.<sup>499</sup> Efforts to best structure financial incentives must be careful to ensure those measures actually achieve their intended goals.

What are the overall impacts of financial incentives on the market? It seems obvious that financial incentives to developers will encourage the demand for brownfields, and likewise, financial subsidies to offset the high cost of cleanup will encourage the supply of brownfields or former brownfields back into the market. Where firms are unable or unwilling to step into deal with environmental harm, such as brownfield market failure, and it is impractical or unwise for governmental authorities to take direct action to resolve the problem, financial incentives may encourage firms to enter the market. Some commentators go so far as to suggest that financial incentives are an “essential” part of

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<sup>493</sup> *Ibid* at 241-242. See also: Louis Kaplow & Steven Shavell, “Fairness Versus Welfare” (2001) 114 Harv L Rev 961 at 995 and Louis Kaplow & Steven Shavell, *Fairness versus Welfare* (Cambridge, MA: Harvard University Press, 2002).

<sup>494</sup> Many commentators recommend some form of financial incentive or subsidy to encourage brownfield redevelopment efforts. See for example Hara, “Correcting Market Failures”, *supra* note 24 at §§10.70-10.106 and Hara, *Market Failures*, *supra* note 30 at 20-24; Hierlmeier, *supra* note 12 at 122-126; Delcan, *supra* note 76 at 49; and Glass Geltman, *Recycling Land*, *supra* note 15 at 348.

<sup>495</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at 19. See also: NRTEE & Canadian Brownfields Network, *Greening Canada’s Brownfields: A National Framework for Encouraging Redevelopment of Qualifying Brownfields through Removal of Crown Liens and Tax Arrears* (Ottawa: NRTEE, 2005) at 6-7.

<sup>496</sup> NRTEE, *Cleaning Up the Past*, *ibid* at 19-24.

<sup>497</sup> RCI Consulting, *supra* note 9 at 22.

<sup>498</sup> Sherman, *supra* note 285 at 366-370.

<sup>499</sup> RCI Consulting, *supra* note 9 at 22.

any brownfield strategy,<sup>500</sup> or that they are “imperative” to redevelopment.<sup>501</sup> Other commentators show a positive relationship between public investment and higher neighbourhood land prices.<sup>502</sup> At least one study shows that the availability of government grants increases the likelihood that a project will be developed.<sup>503</sup> So there is some empirical support for the proposition. However, the effectiveness of such measures has less empirical support.<sup>504</sup>

As Gwilym Price points out, financial incentives for brownfields can exacerbate the moral hazard problem.<sup>505</sup> The moral hazard problem arises whenever a party does not bear the full responsibility for its actions, so it acts with less care than it would if it were held fully responsible for its actions.<sup>506</sup> Government relief of risk is inefficient and distorts the marketplace.<sup>507</sup> It represents a socialization of production costs, whereby government, and not industry, bears the final costs of cleanup.<sup>508</sup> In this context, the use of financial incentives makes high-risk investments (i.e. brownfields) more profitable and more developers will enter the brownfield market, but developers are encouraged to conceal the true extent of the risk to downstream lenders and investors in order to secure much needed private financing at lower interest rates. Instead of raising interest rates, lenders will tend to ration credit for the whole market, and in boom periods, credit may become harder to secure for any new construction project, even for low-risk investments at greenfields.<sup>509</sup> As a result, Gwilym Price advocates for public brownfield projects as a

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<sup>500</sup> Julianne Kurdila & Elise Rindfleisch, “Funding Opportunities for Brownfield Redevelopment” (2007) 34 *Envtl Affairs* 479 at 480.

<sup>501</sup> Hunter Bacot & Cindy O’Dell, “Establishing Indicators to Evaluate Brownfield Redevelopment” (2006) 20 *Econ Dev Q* 142 at 146.

<sup>502</sup> Christopher A De Sousa, Changshan Wu & Lynne M Westphal, “Assessing the Effect of Publicly Assisted Brownfield Redevelopment on Surrounding Property Values” (2009) 23 *Econ Dev Q* 95 at 107-108.

<sup>503</sup> Siikamäki & Wernstedt, *supra* note 24 at 580.

<sup>504</sup> Even Sherman’s study implies that what makes government assistance effective is the orphan share nature of the funding instruments. Grants are preferred because they do not need to be paid back. They are effectively free money paid to the developer that not only reduce up-front costs but obviously improve the developer’s bottom-line at the end of the project. See: Sherman, *supra* note 285 at 366-370.

<sup>505</sup> Gwilym Pryce, “Greening by the Market? Distortions Caused by Fiscal Incentives to Build on Brownfield Land” (2003) 18 *Housing Stud* 563 at 575-578.

<sup>506</sup> Shavell, “Moral Hazard”, *supra* note 123 at 541.

<sup>507</sup> Louis Kaplow, “Incentives and Government Relief for Risk” (1991) 4 *J Risk & Uncertainty* 167 at 173.

<sup>508</sup> Williams & Matheny, *supra* note 397 at 451 and Charles Davis & Richard Feiock, “Testing Theories of State Hazardous Waste Regulation: A Reassessment of the Williams and Matheny Study” (1992) 20 *Amer Politics Q* 501 at 509-510.

<sup>509</sup> Pryce, *supra* note 505 at 577-578.

viable alternative to market-based incentives.<sup>510</sup> This should not, however, be seen as ruling out financial incentives for brownfield projects. Instead, it recognizes that the use of financial incentives have their own distorting effect on the marketplace. Great care needs to be taken when using them to avoid unintended consequences for the market as a whole.

#### 3.3.1.4. *Mandatory Disclosure Programs*

According to Thomas Lyon, when transaction costs are high, the regulator has limited resources to investigate or assess and there is insufficient information on the nature and extent of the environmental harm, then governmental authorities will often look to mandatory disclosure programs to reduce the information gap.<sup>511</sup> The goal of these programs is to inform the public, thus permitting private parties to make more informed decisions concerning the risk connected to a piece of land. The hope is that market players will make land selections that will encourage better prevention and abatement efforts by current landowners and thus reduce the requirement for expensive regulatory reviews.<sup>512</sup> By encouraging landowners and polluters to cleanup their land, mandatory disclosure programs may pre-empt the need for regulatory liability in many cases.

One key area of concern is with stigma that affects land values and can freeze land transactions. Stigma is an important barrier to redevelopment that adversely affects the value of a brownfield and drives down the value of neighbouring lands.<sup>513</sup> It represents the “taint” to a property that leads to a consequential loss in value, which may or may not prove to be true once more information becomes available on the actual condition of the land.<sup>514</sup> Stigma is a perception based on the risk. It is highest when uncertainty is greatest and declines as cleanup and remediation are undertaken and the problem becomes better understood.<sup>515</sup> Without accurate information on the impaired market value of the land, the vendor will tend to overestimate the property value, but equally the purchaser will tend to underestimate it.<sup>516</sup> Therefore, more accurate information before the transaction

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<sup>510</sup> *Ibid* at 579.

<sup>511</sup> Lyon, *supra* note 424 at 6.

<sup>512</sup> Segerson, “Property Transfers”, *supra* note 472 at 271.

<sup>513</sup> Nancy Green Leigh & Sarah L Coffin, “Modeling the Relationship among Brownfields, Property Values, and Community Revitalization” (2005) 16 Housing Pol’y Debate 257 at 277.

<sup>514</sup> RCI Consulting, *supra* note 9 at 36 and Bill Mundy, “Valuing Brownfields” in Todd Davis, ed, *Brownfields: A Comprehensive Guide to Redeveloping Contaminated Property*, 2d ed (Chicago: American Bar Association, 2002) 78 at 87.

<sup>515</sup> RCI Consulting, *ibid*.

<sup>516</sup> *Ibid*. RCI Consulting’s view is heavily developer-centred, like many other surveys of its kind, thus it is overly interested in the demand-side of the equation. This approach overemphasizes the need to protect

closes will move the estimates of value closer together, resulting in more bargains occurring, and ultimately with more brownfield projects being undertaken.

Site profiles and registries provide regulators and the public with better information on the condition of former commercial and industrial lands.<sup>517</sup> They act as a warning to any potential purchaser of the current state of a site and encourage the use of risk assessment during the due diligence phase of a real estate transaction.<sup>518</sup> In order to get at this information some provinces have adopted mandatory site profiles and registries to list brownfields.<sup>519</sup> Some municipalities have also set up lists and adopted site mapping, but the practice is not consistent and the benefits of maintaining these lists are inconclusive.<sup>520</sup> The lists can also reduce perceptions of contamination, lead to faster identification of potential contamination problems, and foster greater acceptance of the goals of brownfield redevelopment.<sup>521</sup>

Whichever direction governmental authorities decide to go, whether through direct government intervention, market-based regulation, financial incentives, mandatory disclosure programs, or some combination of all of them, brownfields will remain an unresolved and persistent problem so long as landowners hold out and the market for brownfield lands remains stuck. However, government authorities must act with care when choosing tools for correcting the brownfield market failure. Each decision has impacts on firms and the market and, if government authorities are not careful, they could face an even less efficient market for brownfields.

### **3.3.2. Clarifying the Regulatory Liability Rules**

The current regulatory liability rules are perceived as a significant barrier to brownfield redevelopment. The fear of broad-based, perpetual liability for those parties considered

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the developer from future liability. It is important to also recognize that the landowner, as the owner of the land, has a right to participate fairly in the benefits that accrue from the redevelopment of its land. The fact that the developer expresses interest in a brownfield site demonstrates that there is value in the land. Thus, it is not merely a question of landowner's overestimating the value of their land but also of developer's underestimating the value. Stripping the benefits from the landowner and passing them along to the developer is a policy choice. However, simply transferring those benefits to the developer is unlikely to resolve the "hold out" problem. If the benefits are taken away from the landowner without adequate compensation, there will be no incentive for landowners to sell and the market fails. Thus, liability relief for landowners may be of equal importance for a well-functioning marketplace for brownfields.

<sup>517</sup> Ontario, *Records of Site Condition*, *supra* note 81 at 31.

<sup>518</sup> RCI Consulting, *supra* note 9 at 31.

<sup>519</sup> Site profiles are used in British Columbia, Ontario, and Alberta to a limited extent.

<sup>520</sup> RCI Consulting, *supra* note 9 at 34.

<sup>521</sup> Delcan, *supra* note 76 at 50.

responsible for cleanup and remediation keeps many firms from investing in brownfields.<sup>522</sup> In addition, many potential developers and investors remain skeptical of the profitability of brownfields because of the high costs of cleanup, the costs of which may eventually come out of the developer's pocket and adversely affect the profitability of the project.<sup>523</sup>

While the PPP remains the key rationale for imposing liability on parties for historic contamination, in fact the regulatory system extends responsibility for cleanup well beyond the polluter to include those connected to the polluter, the polluting activity, or the contaminated land. When the polluter is insolvent, the law currently looks to those connected to the polluter, the polluting activity, or those in some way connected to the contaminated land to bear the costs of cleanup.<sup>524</sup> In other words, when the polluter is insolvent the regulatory liability rules attempt to extend liability to find a solvent payor. Justified on the basis that the public should not bear the cost of cleaning up historic contamination, extended liability seeks to recover any cleanup costs from a variety of related parties who neither profited from the polluting activity in the past nor stand to profit from redevelopment in the future.<sup>525</sup> This includes current landowners and potential developers. As a result the market for brownfields fails as landowners "mothball" contaminated sites and developers avoid the risk that comes with engaging in a brownfield project. Fear of liability results in both a supply side and a demand side market failure.

What follows in the next section is a discussion on efforts to rationalize the use of regulatory liability rules within environmental protection legislation such as *EPEA* and the *WA*. Better use of regulatory liability rules should bring greater certainty to the marketplace and lead to higher rates of cleanup and redevelopment of brownfields. Policymakers need to rationalize liability to ensure that sites are cleaned up and that the risk to human health and the environment is minimized, while at the same time promoting the economic development of blighted neighbourhoods.

### 3.3.2.1. *Rationalizing the Liability for Polluters and Landowners: Supply Side Considerations*

For past contamination, the natural starting point for regulatory liability is the proposition that the polluter should be made to pay for cleanup and remediation efforts. This is the

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<sup>522</sup> RCI Consulting, *supra* note 9 at 7.

<sup>523</sup> *Ibid* at 19-20.

<sup>524</sup> Gergen, *supra* note 420 at 672.

<sup>525</sup> On justification for the BPP see Aretino et al, *supra* note 465 at 20.

PPP.<sup>526</sup> After all, it is the direct and immediate action of the polluter that caused or contributed to the past contamination. While there are a number of rationales for holding polluters liable for past contamination, the strongest candidate for justifying liability finds its foundation in nuisance and *Rylands*-like liability principles. In essence, these principles provide that a person should be held liable because their action unreasonably interferes with public health or safety concerns or offends public standards of morality, comfort or convenience (public nuisance) or unreasonably interferes with the property rights of neighbours (private nuisance), or because a person allowed a hazard to escape from a non-natural use of their land (*Rylands*-like liability).<sup>527</sup> Other related principles draw from similar reasons as *Rylands*-like liability that provides the person responsible for harm must be liable because their actions created an unusual or unreasonable risk to others. In product liability, for example, it is the creation of an unreasonably dangerous risk that attracts liability to the firm.<sup>528</sup> Similarly, in enterprise liability, a person is held responsible for the harm it causes because it allowed an abnormally dangerous risk to exist.<sup>529</sup> In all of these cases, it would appear that an enterprise whose activities create a high risk of harm to others will be held liable for the harm that naturally follows. Thus, a polluter is held liable for past contamination because the risk of harm their activities posed to others is perceived as unreasonable.

This liability for polluters is strict and retrospective too. Strict liability means that the “cheapest cost avoider”, the person in the best position to avoid a loss, is held responsible for prevention and abatement measures.<sup>530</sup> This ensures that the polluter bears the costs of any harm its activities cause rather than placing those losses on society.<sup>531</sup> Retrospective liability means that a person is responsible for environmental harm that occurred before the enabling legislation came into force.<sup>532</sup> Retrospective liability

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<sup>526</sup> Organization for Economic Co-operation and Development (OECD), *Environment and Economics Guiding Principles Concerning International Economic Aspects of Environmental Policies*, Doc No C(72)128 (Paris: OECD, 1972) at 2 and OECD, Trade and Environment, *Environmental Principles and Concepts*, Doc No OCDE/GD(95)124 (Paris: OECD, 1995) at 12 [OECD, *Environmental Principles*].

<sup>527</sup> On public nuisance, see: *Ryan v Victoria (City)*, [1999] 1 SCR 201 at para 52; on private nuisance and *Rylands*-like liability, see: *Tock v St John’s Metropolitan Area Board*, [1989] 2 SCR 1181 at 11-12.

<sup>528</sup> In Canadian law the focus is on a defect that renders a product unreasonably dangerous to the user, see: David S Morritt & Sonia L Bjorkquist, “Product Liability in Canada: Principles and Practice North of the Border” (2000) 27 Wm Mitchell LR 177 at 188.

<sup>529</sup> Atilla Ataner, “How Strict Is Vicarious Liability? Reassessing the Enterprise Risk Theory” (2006) 64 U Tor Fac L Rev 63 at 81-103.

<sup>530</sup> Guido Calabresi & Jon T Hirschoff, “Toward a Test for Strict Liability in Torts” (1972) 81 Yale LJ 1055 at 1060-1061.

<sup>531</sup> This is in contrast to a negligence standard that places the risk of harm on the victim unless the victim is able to show that the polluter should have taken reasonable steps to avoid the harm and failed to do so.

<sup>532</sup> Fullerton & Tsang, *supra* note 191 at 3 and *McColl-Frontenac*, *supra* note 64 at para 89.

reaches back to the past polluter to make good any harm its activities caused even if the harm was unknown or unavoidable at the time, and even if those activities were not illegal or were tacitly condoned by the regulatory authorities at the time the contamination occurred. These steps place the polluter at the centre of the liability spotlight, focusing the responsibility for past contamination on the polluter no matter what steps it took at the time and no matter how far back in time the spill occurred.

While the PPP is well-ingrained in Canadian legislation, no reference is made to the term “polluter” in environmental protection statutes. At the provincial level, “polluter” is not used to describe a responsible person in either *EPEA* or the *WA*, and at the federal level, that term is not used in *CEPA*. Instead, reference is made to the owner of the contaminant or those who managed and controlled the contaminant at the time of the spill.<sup>533</sup> Because of the emphasis on contaminated sites in some provinces, reference is also made in many provinces to the landowner or occupier of the land.<sup>534</sup> While Alberta Environment avoids the contaminated sites provisions of *EPEA*, under the *WA* and *CEPA* a landowner has obligations to report and cleanup contamination. This difference creates some risk for non-polluters and mere landowners, resulting in some unnecessary supply side market failure from overreaching legislation. Not all landowners and occupiers are the polluters and not all benefitted from the polluting activity, particularly in the case of historic contamination where title to the land may have passed from the original polluter decades before the contamination problem was discovered.

While some extensions of liability may be justified on the basis of the beneficiary pays principle (BPP), which holds those who will benefit from the cleanup and redevelopment of blighted lands are responsible for cleanup costs and remediation, many of the extensions of liability are not.<sup>535</sup> Holding those liable who will benefit from cleanup and redevelopment causes a demand side market failure as private industry will simply forego brownfields for more lucrative and less risky greenfields projects. Without some premium for undertaking the risk associated with a brownfield, there is little incentive for developers to choose brownfields over greenfields. In addition, in some cases the current landowner may not have received a benefit from a discounted purchase price when they acquired title years ago, so they cannot be seen as benefitting from the past contamination.

Perhaps the strongest argument for liability relief for past polluters and landowners is the retrospective nature of liability. Retrospective liability is often seen as a backward-

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<sup>533</sup> See, for example: *EMA*, s 45(1)(c), *EPEA*, ss 1(tt)(i)-(ii), *CSRA*, ss 9(1)(c)-(d), *EMPA*, ss 2(w)(i)-(ii), and Manitoba *Environment Act*, s 1(2) “person responsible for a pollutant.”

<sup>534</sup> See, for example: *EMA*, ss 45(1)(a)-(b), *EMPA*, s 2(w)(iii), Ontario *Environmental Protection Act*, s 1(1) “persons responsible”, and *CSRA*, ss 9(1)(a)-(b).

<sup>535</sup> In essence the BPP holds that those who will benefit from the cleanup and redevelopment should bear the cost, see: Aretino et al, *supra* note 465 at 18-19.



looking “cash grab” rather than as a forward-looking tool to promote deterrence and encourage better pollution prevention measures. It also has a “chilling effect” on the market, contributing to the hold out problem.<sup>536</sup> Such arguments suggest more financial support of cleanup through government assistance programs or direct government cleanup programs. Earlier in this section, I discussed ARPs, operated by municipalities and financed through local taxes and government grants. If the ultimate beneficiary of polluting activities were consumers (who did not bear the true cost of the polluting activity), the community (from products and jobs created by polluters), and the government (from taxes paid by polluting industries), then the burden of the cleanup is as much a public responsibility as it is a polluter’s responsibility.

Earlier in this section, I discussed the possibility of using transferability rules. These rules would allow the vendor to transfer liability, in certain circumstances, to a willing purchaser. This could resolve the hold out problem, at least so far as it relieves polluters and landowners from the risk of future retroactive liability for any past contamination. Such an approach could be useful for increasing the supply of brownfields on the market, particularly in the case of “one-off” cleanup and redevelopment of specific brownfield sites such as abandoned gas stations. ARPs remain a more streamlined and neighbourhood wide approach because it places both the financial capacity and the administrative authority to facilitate neighbourhood-wide revitalization in a single assembler.

### 3.3.2.2. *Rationalizing Extended Liability: Demand Side Considerations*

The judgment-proof problem or solvency constraint stands as the primary reason for the use of extended liability in the case of contaminated land. The judgment-proof problem occurs whenever an injurer is unable to fully satisfy a claim for damages for which they are found liable.<sup>537</sup> If the true polluter cannot be found or made to pay, and if government assistance is to be avoided, then the cheapest approach, at least from a liability regime standpoint, is to broaden the classes of persons who may be held responsible for the harm and made to pay for the cleanup.

#### 3.3.2.2.1. The Liability of Successors: An Example, the Legal Oil & Gas Ltd. Decision

Successors and assignees are named as parties by extension under the general interpretative section for persons responsible (and by implication the substance release provisions), the contaminated sites provisions, and the conservation and reclamation

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<sup>536</sup> RCI Consulting, *supra* note 9 at 9.

<sup>537</sup> S Shavell, “The Judgment Proof Problem” (1986) 6 Int’l Rev L & Econ 45 at 45.

provisions of *EPEA*.<sup>538</sup> This permits Alberta Environment to extend liability from the polluter to their successors and assignees. As discussed in section 2, successor liability is justified either because of the continuity of the entity or to avoid a fraud being perpetrated on a victim.<sup>539</sup> Fairness is both a practical consideration and the logical restraint on the use of successor liability.

The question of fairness arose in *Legal Oil*, a successor case, precisely because of the judgment-proof problem. The true polluter no longer existed. In order to find a solvent party to perform the cleanup, the Director issued a Part 5, Division 1 (the substance release provisions) EPO against Legal Oil & Gas Ltd., the current well-site operator, for all the contamination, including that which predated Legal's operations. Legal acquired their interest in the well-site in 1961. Its predecessor, Sinclair Canada Oil Company, used an onsite pit for containing the salt water brine extracted from the well. However, brine and some hydrocarbons had migrated from the pit, from spills, overflow or leaching and contaminated the adjoining lands. Much of the spillage likely occurred during Sinclair's operation of the well. Subsequently, Sinclair went out of business. In 1998 the Director issued an EPO directing Legal to remediate the whole site. Legal argued that it did not assume responsibility for Sinclair's share of the contamination. The EAB, upon review of the Director's EPO, held Legal liable as the assignee of Sinclair's obligations under the terms of the lease with the landowner. The lease required the lessee to indemnify the landowner for any loss, injury, damage, or obligation to compensate for loss or damages. Upon further review by the Court of Queen's Bench, Justice Clarkson upheld the EAB decision.<sup>540</sup>

On what basis was it fair to extend liability to Legal for Sinclair's prior conduct? According to the EAB:

Through this inheritance, Legal Oil become the "owner" of the released substances; Legal Oil had "management and control" over those substances; and Legal Oil was a "successor" and "assignee" of Sinclair, which itself was an "owner" of, and had "management and control" over, those substances. Thus, Legal Oil is clearly a "responsible person" under the Act's definition of that term in subsection 1(ss) [now subsection 1(tt)] of the Act and was, in turn, validly named in the Director's section 102 [now section 113] Order.<sup>541</sup>

Thus, Legal, by accepting Sinclair's obligations under the lease, also became Sinclair's successor by contract. From this it would appear that a subsequent party who

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<sup>538</sup> *EPEA*, ss 1(tt)(iii), 107(1)(c)(iv) & 134(b)(vi).

<sup>539</sup> George W Kuney, "Jerry Phillips' Product Line Continuity and Successor Corporation Liability: Where are We Twenty Years Later" (2005) 72 *Tenn L Rev* 777; and Marie T Reilly, "Making Sense of Successor Liability" (2003) 31 *Hofstra L Rev* 745 at 793-794.

<sup>540</sup> *Legal Oil* 2000, *supra* note 87 at para 43.

<sup>541</sup> *Legal Oil and Gas Ltd v Director, Land Reclamation Division, Alberta Environmental Protection* (23 July 1999) EAB Appeal No 98-009 at para 16 [*Legal Oil* 1999].

assumes a predecessor's obligations without reservation in the contract can be liable for the whole of its predecessor's share of the damages. It is less clear if a specific reservation in the contract would have led to a different result. Sinclair was insolvent. The problem the Director faced was how to justify an extension of liability in the face of Sinclair's insolvency. It is possible that the "identity" between the polluter and the successor or the "continuity" of the polluting enterprise remains so strong that liability would still follow to the successor. Thus, Legal might still have been liable as the current operator of the well-site even with a solvent predecessor.

Successor should not mean successor in title. Other considerations apply when dealing with contaminated land where the true polluter is insolvent. But what does successor mean in this context? First, it could mean those who voluntarily assume responsibility by contract or agreement, such as the case in *Legal Oil*.<sup>542</sup> Second, successor could mean an "identity of personality." This would occur most often during a corporate reorganization where a polluter simply rolls over its assets into the successor, so that the polluter and the successor are deemed to be the same person.<sup>543</sup> Third, it could mean a successor from a "continuity of enterprise." This occurs where the purchaser acquires "the predecessor's manufacturing business and [continues] production of the predecessor's product line."<sup>544</sup> The successor merely continues the polluter's business under different ownership. It is distinguishable from an "identity of personality" because the polluter and the successor are not necessarily the same or related parties. Fourth, successor could relate to efforts to prevent fraudulent transactions. The successor is held liable in order to prevent a predecessor from escaping liability for its past wrongs, where the successor is complicit in the scheme.<sup>545</sup> It would occur where the transaction amounts to a "sham" designed to permit the polluter to dump its toxic assets to avoid liability.

Fairness requires balancing interests. In the environmental law context, it requires determining as between party A and party B who should bear the costs of prevention and cleanup of pollution. The purpose of environmental liability rules is to make the polluter internalize its environmental externalities either through prevention or abatement measures. The EAB was aware of this balance in *Legal Oil* when it pointed out "[i]t is

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<sup>542</sup> See: Michael Carter, "Successor Liability Under CERCLA: It's Time to Fully Embrace State Law" (2008) 156 U Penn LR 767 at 778.

<sup>543</sup> See: *ibid* at 778-779.

<sup>544</sup> George Kuney identifies this approach in *Ray v Alad Corp*, 560 P2d 3, 11 (Cal 1977), where the court found the successor corporation, an assignee, liable for the torts of its predecessor in a product liability case. *Ray* sets out three conditions: (1) the virtual destruction of the plaintiff's remedies against the predecessor from the successor's acquisition of the business; (2) the successor's ability to assume the predecessor's risk-spreading role; and (3) it is fair for the successor to assume the predecessor's liability because responsibility for the defective product is attached to the predecessor's goodwill, something that the successor enjoys from the continued operation of the business. See: Kuney, *supra* note 539 at 784-790.

<sup>545</sup> See: Carter, *supra* note 542 at 780.

likely impossible to develop solutions to the pervasive problem of historic contamination which are fair to everyone or even equally unfair to all interested parties (including Alberta tax payers).<sup>546</sup> Certainly, where a successor takes over all or substantially all of the business or the assets of the polluter leaving the polluter a mere shell, where a successor stands in virtually the same position as the polluter in terms of insurance and risk-spreading ability, and where a successor benefits from the continuity of the polluter's business, it may be fair to hold a successor liable for the prior wrongs of its predecessor.<sup>547</sup> After all, the successor has identity with the polluter's business or assets, the solvent successor can better loss-spread the costs of cleanup, and the successor benefits from the polluter's business. However, even here fairness starts to slip away from a decision-maker when the gap between the past release and its discovery grows.<sup>548</sup> While it might be fair if the gap is relatively small, given that the successor has acquired both the assets and the goodwill of the polluter, after many years the fairness of holding the successor liable begins to diminish considerably.<sup>549</sup> So, the successor's knowledge, actual or imputed, of the prior pollution becomes an important factor.

Successor liability prevents a firm from shifting "delayed, knowable risks to victims."<sup>550</sup> As a matter of deterrence, it makes the successor perform some due diligence "to calculate the relevant exposure" before entering the transaction.<sup>551</sup> It also prevents a polluter from discharging its environmental liabilities through bankruptcy or creditor protection proceedings because a successor has an incentive to discount the purchase price to better reflect the risk it assumes when it acquires the toxic assets.<sup>552</sup> A purchaser of toxic assets who knows of the contamination enters the transaction at its own risk. Even though it may not have caused or contributed to the contamination, it knew of the contamination and assumed the risk that it may be held responsible for cleanup. In *Legal Oil*, the company had full knowledge of Sinclair's disposal practices before it entered the contract.<sup>553</sup> Legal could have discounted the purchase price to reflect the risk it knew, or ought to have known, it would assume. Knowing the risk it could also have simply walked away from the transaction, sending a strong message to Sinclair, and other

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<sup>546</sup> *Legal Oil* 1999, *supra* note 541 at para 39.

<sup>547</sup> Kuney, *supra* note 539 at 789.

<sup>548</sup> This is sometimes referred to as the delayed risk concern, see: Alan Schwartz, "Products Liability, Corporate Structure, and Bankruptcy: Toxic Substances and the Remote Risk Relationship" (1985) 14 J Legal Stud 689 at 706-711.

<sup>549</sup> Certainly, the longer the period of time from the sale to the discovery of the contamination, the less the original assets can be said to be connected to the polluter's activities and the less the goodwill of the business is associated with the predecessor.

<sup>550</sup> Schwartz, *supra* note 548 at 717.

<sup>551</sup> *Ibid* at 716.

<sup>552</sup> *Ibid*.

<sup>553</sup> *Legal Oil* 1999, *supra* note 541 at para 39.

polluters, to clean up their pollution. By completing the transaction in spite of its knowledge of the contamination, Legal assumed the risk.

Successor liability leads to a similar result as the transferability rules discussed earlier in this section. It shifts the risk of future liability from the polluter to a purchaser. In the *Legal Oil* case, full liability shifted to Legal because Sinclair was insolvent, however, Legal assumed the risk when it acquired Sinclair's lease. In the case of transferability rules, full liability shifts to the purchaser not because of the insolvency of the polluter but because the purchaser voluntarily assumes the future risk. The main difference is the uncertainty associated with successor liability without firm transferability rules, since the liability position of the vendor and the purchaser remains uncertain until the regulator has assessed and apportioned liability as between the parties. Thus, for efficiency reasons and to reduce transaction costs it makes sense to qualify successor liability under the same terms as the transferability rules. Those terms include: full disclosure, financial assurances, prescribed time limit for cleanup, and capacity to effect cleanup.<sup>554</sup>

### 3.3.2.2.2. Management and Control: Principals and Lenders

A person with the management and control of a contaminant or a contaminated site is potentially subject to an EPO for the cleanup.<sup>555</sup> In this context, control may mean control over the act of pollution, control over the polluting act, or control over the activity that causes the pollution, whether directly or indirectly.<sup>556</sup> Indicia of control might include authority over the planning and development of a facility or site, staff supervision and training, and record keeping and reporting.<sup>557</sup> This may extend liability beyond the true polluter to include those with indirect control over the contaminant or the contaminated site such as principals and lenders.

When a party benefits from a polluter's activities and controls or influences a polluter's decisions about risky conduct, and that conduct leads to actual harm, such a party should not be allowed to avoid liability. This is particularly so where the true polluter no longer exists or becomes insolvent. Fairness dictates that controlling parties bear some risk for the pollution, and where the polluter is insolvent, that risk materializes to make the controlling party liable. They bear the risk because they were better positioned, relative to society or other parties, to prevent the harm in the first place. They either participated in the management of the polluter or they were in a position to influence the polluter's conduct.

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<sup>554</sup> See: NRTEE, *Cleaning Up the Past*, *supra* note 1 at 25-26 and CCME, *Recommended Principles*, *supra* note 2 at 11-14.

<sup>555</sup> *EPEA*, s 1(tt)(ii).

<sup>556</sup> See: *R v Edmonton (City)*, 2006 CarswellAlta 210 (Prov Ct) at para 520.

<sup>557</sup> See: *R v Mac's Convenience Stores Inc* (1985), CarswellOnt 1992 (Ont Prov Ct) at paras 65-68.

*Principals:* EPEA extends liability to principals and agents of a person responsible or an operator.<sup>558</sup> In *Legal Oil & Gas Ltd. v. Alberta (Minister of Environment)*, Clackson J. upheld the decision of the EAB and extended liability to the President and sole shareholder of Legal Oil & Gas Ltd., the company, as a person responsible, either as a principal or agent.<sup>559</sup> The EAB found that the term “principal” in EPEA included the “chief” or “head” of the company.<sup>560</sup> Mr. Forster, the President and sole shareholder of Legal, exercised “managerial control” of Legal such that there was strong “identity” between Legal and Forster.<sup>561</sup> Thus, for the EAB, “from a public interest standpoint, for Mr. Forster to be able to hide behind Legal Oil’s corporate “veil” to avoid liability for what were essentially his own business decisions” would be unfair.<sup>562</sup>

The instrumentality rule requires that the misconduct of the principal cause or contribute to the loss.<sup>563</sup> In the discussion from section 2, the instrumentality rule does so because there must be something more to hang liability on than just a contractual connection between the corporation and a director or shareholder. After all, the corporate contractual bargain is supposed to be founded on limited liability and a separation of legal personality. Otherwise, “the parties will not have created a ‘corporation’ but ... most probably some form of partnership.”<sup>564</sup> There is no indication in *Legal Oil* that Mr. Forster’s conduct was wrongful or that his conduct caused or contributed to the loss. In fact, quite the contrary, the loss seems to have been caused by Sinclair, another corporation entirely. Thus, the application of the instrumentality rule here, without evidence of Mr. Forster’s fault, is unfair. It should not matter if he had control of Legal unless Mr. Forster’s misconduct, as the act of the directing mind of Legal, had “identity” with the misconduct at issue. The misconduct at issue was Sinclair’s contamination from their previous use of the brine pit. While extended liability makes an existing, and presumably solvent, person pay for the cost of cleanup, where the polluter, Sinclair, no longer exists, it does so at the cost of fairness, strictly speaking. In addition, there is no

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<sup>558</sup> It does so through the express provisions of ss 1(tt)(iv) and 107(1)(c)(vi), but also through the vicarious liability provision in s 253.

<sup>559</sup> *Legal Oil 2000*, *supra* note 87 at paras 44-46. Similarly, in *Sarg Oils*, *supra* note 484 at 11, the EAB found the President and shareholder liable as agent of the operator for reclamation of specified lands.

<sup>560</sup> *Legal Oil 2000*, *supra* note 87 at para 46.

<sup>561</sup> *Legal Oil 2000*, *ibid* at paras 18 & 23.

<sup>562</sup> *Ibid* at para 23.

<sup>563</sup> According to Jason Neyers, it is the fault of the corporate agent that often forms the basis for liability, see: Jason W Neyers, “Canadian Corporate Law, Veil-Piercing, and the Private Law Model Corporation” (2000) 50 U Tor LJ 173 at 227 [Neyers, “Canadian Corporate Law”]. A director is the directing mind where his or her culpable intention and illegal act were also those of the corporation, see: Scott G Requadt, “Lender on a Hot Tin Roof: The Developing Doctrine of Lender Liability for Environmental Cleanup in Canada” (1992) 50 U Tor Fac L Rev 194 at 220.

<sup>564</sup> Neyers, *ibid* at 225.

indication that Legal, as an assignee of Sinclair's legal obligations under the lease, was unable to pay the costs. On this basis, it would seem that the EAB erred in extending liability to Mr. Forster.

The better approach is to hold a principal responsible based on enterprise liability. In section 2, I noted that enterprise liability holds a principal liable because the principal's enterprise creates or enhances a risk of harm or loss.<sup>565</sup> It is fair because a person whose enterprise creates a risk should bear the loss when those risks materialize and result in a loss.<sup>566</sup> Unlike the instrumentality rule it does not require evidence of misconduct for a finding of liability. Nor does it require a foreseeable risk since the principle applies a strict liability standard not a negligence one. Instead, enterprise liability merely requires a sufficient connection between the creation or enhancement of a risk and the wrong.<sup>567</sup> However, enterprise liability, as a form of vicarious liability, also serves policy goals other than fairness, including compensation, risk-spreading and deterrence.<sup>568</sup> First, it ensures that a solvent party pays the loss, thus fulfilling a compensatory goal. Second, it places liability on the party in a better position to spread the risk of loss through insurance or cost internalization. Third, it serves a gatekeeper function, making the principal responsible for monitoring and regulating its agents. This acts to encourage precaution. It also places responsibility for monitoring and regulating an agent, on the party better able to perform the gatekeeping function. On this basis, extending liability to the principal of a polluter may be fair.

The EAB extended liability to Mr. Forster in *Legal Oil* on the basis that Mr. Forester, as the director and sole shareholder of Legal, had control over Legal. Control liability often requires knowledge, benefit, and the ability to prevent or abate the pollution. The EAB seems to apply control liability in *Imperial Oil and Devon Estates* as well. In that case, the EAB held Devon Estates Ltd. liable as a principal with respect to a joint venture agreement (JVA). Devon had entered a JVA with Nu-West for the development of the Lynnview Ridge subdivision in Calgary, the terms of which granted each an equal interest in the project and, along with access to information and joint decision-making, provided that each would indemnify the other for all risks. At the time of the EPO, Nu-

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<sup>565</sup> *Bazley v Curry*, [1999] 2 SCR 534 at para 22 [*Bazley*], where McLachlin J said "The common theme resides in the idea that where the employee's conduct is closely tied to a risk that the employer's enterprise has placed in the community, the employer may justly be held vicariously liable for the employee's wrong." For Justice McLachlin, the main policy considerations governing vicarious liability are the provision of a just and practical remedy for harm and deterrence of future harm, which both serve loss internalization goals, *ibid* at para 29. See also: the comments of JW Neyers, "A Theory of Vicarious Liability" (2005) 43 Alta L Rev 287 at 297-300.

<sup>566</sup> *Bazley*, *ibid* at para 31.

<sup>567</sup> *Ibid* at para 41.

<sup>568</sup> See commentary of La Forest J in *London Drugs Ltd v Kuehne & Nagel International Ltd*, [1992] 3 SCR 299 at 45-46.

West no longer existed and therefore could not be pursued by the Director. Here, liability was extended to Devon as a principal of Nu-West. While Nu-West was the operator under the JVA, nevertheless, Devon knew of the activities conducted at the site and could have prevented any harmful activities.<sup>569</sup> Devon benefited from Nu-West's activities. Furthermore, Devon could have taken steps to ensure Nu-West conducted a proper cleanup.

*Lender Liability:* One of the problems with a control test for extending liability is that control must be viewed along a spectrum. It ranges from mere administrative or audit functions at one end to full management of the day-to-day operations of a polluter at the other end. At the one end the potentially liable party and the polluter are arm's length and function independently, while at the other end, there is identity between the potentially liable party and the management of the polluter. This problem can be seen in the case of lender liability discussed in section 2. A lender may have the ability to influence the environmental precautions taken by a debtor. Lenders exert control over a debtor's business in a number of ways. They often impose conditions on how the collateral is secured, maintained and used, allowing for the right of entry, assignment of rents and workout procedures, as well as conditions for the environmental state of the equipment, facility, or land.

But what constitutes sufficient control to make a lender liable (or any other principal for that matter)? At one end of the spectrum, it might mean only those situations where the lender actually participates in the business operations of the polluter and encourages or condones the polluter's wrongful conduct.<sup>570</sup> In that case, extended liability is restricted to only the most active lenders. It is limited to those circumstances where the lender's involvement encourages the polluter to engage in risky behaviour and that conduct leads to actual harm. At the other end of the spectrum, it could simply mean the actual "possession and dominion" of the contaminant or the contaminated land by the lender.<sup>571</sup> This form of control may arise from foreclosure or workout proceedings. Somewhere between these two lines of authority are a number of middle positions. First, control might mean the ability to influence the polluter's decisions and the failure to do so.<sup>572</sup> Such an approach would hold a lender liable for not only those situations where it

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<sup>569</sup> *Imperial Oil and Devon Estates*, *supra* note 63 at paras. 68-69.

<sup>570</sup> See the comments of Christopher JH Donald, "Limited Partnerships and the "Control" Liability of Limited Partners" (2007) 44 Can Bus LJ 398 at 406 in relation to control liability.

<sup>571</sup> See: *Canadian National Railway v Ontario (Director appointed under the Environmental Protection Act)*, 1991 CarswellOnt 232 (OCJ, Gen Div), *aff'd* 1992 CarswellOnt 212 (CA) at paras 3-6 [also referred to as *Northern Wood Preservers*] [NWP]. See also the comments of Requadt, *supra* note 563 at 204.

<sup>572</sup> *United States v Fleet Factors Corp* (1990), 901 F2d 1550 (11<sup>th</sup> Cir) [*Fleet Factors*]. For related cases involving control liability, see also: *R v Sault Ste Marie (City)*, [1978] 2 SCR 1299 [*Sault Ste Marie*] (a municipality for the conduct of its waste management agent); *R v Abitibi Consolidated Inc* (2000), 190



actively participated in the polluter's business but also in those situations where it had the ability to influence the polluter's behaviour but chose not to intervene. This would be consistent with *Sault Ste. Marie*, where the court, in the context of a municipality delegating its authority to others,<sup>573</sup> said, "[l]iability rests upon control and the opportunity to prevent" the loss and later, "[p]rima facie, liability will be incurred where the defendant could have prevented the impairment by intervening pursuant to its right to do so under the contract, but failed to do so."<sup>574</sup> Second, control might mean those circumstances where the lender actually participates in the day-to-day operation of the business.<sup>575</sup> This would occur most often where the lender, through a receiver or trustee in bankruptcy, continued the business of the polluter. In most cases it would not likely be fair to extend liability to a lender if it did not have the ability to at least avoid the loss.

In the normal course of business, a lender's position relative to the polluting activity differs significantly from that of the true polluter. The true polluter's activity is the direct and proximate cause of the contamination. It is the polluter's enterprise that created the harm. A lender is not in the same business as the polluter. A lender is in the business of providing capital for businesses for a fee. Lending does not create the harm; at best it may be said that by financing a polluter's business, a lender facilitated the creation of the harm. Clearly, a polluter is in the best position to prevent or abate the contamination since it has direct and immediate control over the polluting activity. A lender who does not take over the business operations of a polluter has only indirect control over the polluter and the polluting activity because it can choose to finance the business or not.

Where the true polluter is insolvent, fairness requires that those who were better able to prevent the harm bear the loss. While a lender may be able to prevent or abate the contamination, relative to other parties it may not have been the best person to take those measures. A government agency, for example, may have been better positioned to monitor and regulate a polluter's compliance with the law. A principal's position is superior to both a lender and a government agency. After all, a principal can hire, discipline and fire an agent or employee and has the ability to regulate its agents and employees. Unless the lender comes into direct control of the contaminant or the

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Nfld & PEIR 326 (Nfld Prov Ct) (a landowner of a hydro project site for the conduct of the construction contractor); and *R v Placer Developments Ltd* (1983), 13 CELR 42 (YT Terr Ct) (a mining lease holder for the conduct of a contractor, performing exploration work, who permitted gasoline to leak from their campsite).

<sup>573</sup> This is an important distinction since a municipality, with statutory duties and obligations to the public, is held to a higher standard in connection with the conduct of its agents. This is not the same for lenders in relation to their debtors. That relationship is contractual. See: Requadt, *supra* note 563 at 207-208.

<sup>574</sup> *Sault Ste Marie*, *supra* note 572 at 1321 & 1330.

<sup>575</sup> *United States v Mirabile* (1985), 15 Env'tl L Rep 20994 (EDPa).

polluting activity, fairness would seem to dictate a less strict standard for lenders than for true polluters and principals.

The relationship of a lender to the polluter or polluting activity is usually much more distant than that of a principal. Typically, a principal benefits directly from the polluter's activities. There is often a strong "identity" between a principal and the polluter, such that the activities of the polluter are associated with the enterprise of the principal. A principal also controls a polluter's conduct through the day-to-day management of the polluter's business operations or the hiring of agents or employees to perform those functions on its behalf. This puts a principal in a far superior position to prevent or abate contamination than a lender. A lender, on the other hand, is usually connected to the polluter only by the loan agreement. The loan agreement sets out the entire relationship between the parties. The degree of "identity" between the lender and the polluter is relatively low. Thus fairness requires that a lender not be held liable for the misconduct of a polluter unless it otherwise comes to exert the same degree of control over a polluter or the polluting activity as that of a principal. This would be the case if the polluter were perceived as the lender's agent, such as was the case for a municipality in *Sault Ste. Marie*.<sup>576</sup> So, the result in *Fleet Factors* would appear to be a fair one.<sup>577</sup> A lender with control over a polluter or a polluting activity, and who fails to control its agent, should be liable for its agent's conduct. In the normal course, however, the better view would seem to be that a lender should not be liable unless it directly participates in the operation of the polluter's business.

Some jurisdictions exempt lenders unless a lender's direct or indirect conduct otherwise causes or aggravates the contamination. In British Columbia, for example, a lender may become liable when it takes title to contaminated land or where it "exercises control or imposes requirements" that cause contamination.<sup>578</sup> In Saskatchewan a lender may become liable when it participates in the day-to-day management and control of the site or its conduct causes a discharge or aggravates an adverse effect.<sup>579</sup> However, the protection for lenders in British Columbia, Manitoba and Ontario goes further. Exemptions in those provinces specifically address the lending industry's concern over potential liability when they take over title to contaminated land through foreclosure or workout procedures. Thus, in British Columbia a lender is not liable "if it acts primarily to protect its security interest" even where it obtains title to the contaminated land.<sup>580</sup>

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<sup>576</sup> *Sault Ste Marie*, *supra* note 572.

<sup>577</sup> *Fleet Factors*, *supra* note 572.

<sup>578</sup> *EMA*, s 45(3).

<sup>579</sup> *Environmental Management and Protection Act, 2002*, SS 2002, c E-10.21, s 2(w)(viii) [*EMPA*].

<sup>580</sup> *EMA*, s 45(4). Subsection 45(4) lists a number of non-exhaustive situations where a lender would be exempt: (1) where a lender participates only in purely financial matters; (2) where a lender can influence operations that cause pollution but refrains from so acting; (3) where a lender imposes requirements on the

Manitoba exempts lenders for investigation, foreclosure and workout proceedings, and prevention and abatement efforts.<sup>581</sup> In Ontario, a lender who takes over title through foreclosure proceedings is not subject to an environmental order except for gross negligence or wilful misconduct,<sup>582</sup> as well as being exempt for any actions taken to investigate, to preserve or protect their interests, or to respond to an environmental emergency.<sup>583</sup> However, in Alberta there is no specific exemption for lenders. In Alberta, the common law test for control will apply in the case of lenders.

In summary, the case of a principal, liability is based on the principal's control of the polluting activity. The principal has used the polluter to introduce a risky activity into the marketplace. The polluting enterprise belongs to the principal. Extended liability is justified through notions of enterprise liability or instrumentality. In the case of a lender, liability comes from a different rationale. At first, the lender and the polluter are arm's length entities connected to each other only by a financing contract. The lender exerts little or no control over the activities of the polluter. However, as a polluter falls into financial distress or becomes insolvent, a lender (often through a receiver or trustee) begins to exert more control over the polluter's day-to-day activities, so that at its fullest a lender is directing all aspects of the polluter's day-to-day activities. At its fullest, a lender is in the very same position as a principal.

The *Sault Ste. Marie* control test would be very similar to the *Fleet Factors* test in that the lender would have sufficient control to be held liable only if it had the power to prevent or abate the pollution, whether it chose to do so or not. If *Northwest Preservers* or *Mirabile* are followed in Alberta, the risk for lenders is very low. *Northwest Preservers* requires actual "possession" of the polluter or the contaminated land and *Mirabile* requires actual management of the polluter or the contaminated land. Lender liability appears to be a non-issue for encouraging or discouraging the demand side of the market for brownfields. The sort of insolvency problems that would require a lender to step into a brownfield situation appear to be largely associated with the ongoing operations of a polluter's business or with the real property of a current landowner, all of which are supply side issues. Lenders to a potential purchaser would balance their risk through strict due diligence, some form of title insurance or pollution insurance, personal guarantees, and of course higher interest rates for shorter terms to reflect the risk. A lender's exposure on the demand side would be minimal. Thus, the effect of potential lender liability rules would also have a minimal impact on the demand for brownfields. In

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polluter, but those requirements are not likely to cause pollution; or (4) where a lender appoints a person to inspect or investigate the contaminated site to help assess further action.

<sup>581</sup> CSRA, s 9(2)(f).

<sup>582</sup> Ontario *Environmental Protection Act*, s 168.18. The lender exemption last for up to five years and may be extended by the Director.

<sup>583</sup> Ontario *Environmental Protection Act*, s 168.17.

conjunction with transferability rules that ensure that a developer has the financial means to complete cleanup and redevelopment of a brownfield, the current regulatory liability rules as a whole should have no real impact on the market. Therefore, the position taken in Alberta to not add lender exemptions appears to be the correct one.

### 3.4. Overcoming the Public Choice Failures

The cleanup of brownfields is a public choice. A cleanup strategy for brownfields allocates scarce societal resources in time, money and labour toward a common goal — that of a clean and safe environment for all. That goal, while important, must be balanced against other important societal goals. Often the approach to brownfields has been to leave the contamination in the ground unless contaminants are exposed from a ground disturbance such as construction work.<sup>584</sup> Brownfield cleanup and redevelopment is expensive. Remediation must be paid for now but the benefits in reduced risks to human health, safety and the environment do not accrue until the future.<sup>585</sup> To compound this, research from the U.S. indicates that the easier sites are being remediated first.<sup>586</sup> This means that those sites with the most challenging environmental problems are the least likely to be cleaned up.<sup>587</sup> Thus, the sites that remain a problem are also more likely to be the most costly to remedy. How far should government and private industry go to clean up the more difficult brownfields?

Brownfields are often associated with the municipal sustainable development movement that tries to balance current social, economic and environmental needs against those of the future.<sup>588</sup> Many government authorities have adopted sustainability as a goal for future growth. For example, The City of Calgary uses a Triple Bottom Line framework which means that “The City will incorporate sustainable development principles into its decisions and actions.”<sup>589</sup> This approach, according to The City of Calgary, is to advance a vision to “create and sustain a vibrant, healthy, safe and caring community”, to embed the Triple Bottom Line into city policies, actions and procedures,

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<sup>584</sup> For example, the City of Calgary differentiates between a current spill or release and contamination that is unexpectedly discovered when responding to clean up: see: Calgary, *Contamination Discovery Response Procedure for Ground Disturbance* (Calgary: City of Calgary, 2008) at 1.

<sup>585</sup> Anna Alberini et al, “Paying for permanence: Public preferences for contaminated site cleanup” (2007) 34 *J Risk Uncertainty* 155 at 156.

<sup>586</sup> Dorothy M Daley & David F Layton, “Policy Implementation and the Environmental Protection Agency: What Factors Influence Remediation at Superfund Sites?” (2004) 32 *Pol’y Stud J* 375 at 388.

<sup>587</sup> Bogen, *supra* note 19 at 227.

<sup>588</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at ix-x.

<sup>589</sup> Calgary, *Triple Bottom Line Policy Framework* (Calgary: City of Calgary, 2006) at 4.

and to place the City's efforts within a global context.<sup>590</sup> Within this framework, the City adopts a policy for contaminated site review within their land stewardship and protection role alongside the goal of reducing the impact of landfills and the goal to reduce the impact of natural resource extraction.<sup>591</sup> In this context, the City of Calgary reviews development applications and environmental investigation reports to assess the physical state of the land, off-site conditions, environmental impacts, nuisances, and emissions and operation issues.<sup>592</sup> Brownfields are reviewed and monitored.

Framed as a sustainability issue, brownfields represent not only an environmental issue but also represent an obstacle to economic and social goals. The general literature points to a number of benefits of brownfield cleanup and redevelopment, including better health and safety for citizens, smarter urban growth, job creation from urban revitalization projects, curtailing the infrastructure problems associated with urban sprawl, and increase or restored tax base for currently depressed neighbourhoods.<sup>593</sup> The NRTEE supports brownfield redevelopment for a number of reasons, indicating a number of economic, social and environmental benefits such as:

- (a) the creation of jobs;
- (b) increased competitiveness of cities;
- (c) increased expert potential of Canadian cleanup technologies;
- (d) increased tax base;
- (e) improved quality of life in neighbourhoods;
- (f) removal of threats to human health and safety;
- (g) affordable housing;
- (h) reduced urban sprawl;
- (i) restoration of environmental quality; and
- (j) improved air quality and reduced greenhouse gas emissions.<sup>594</sup>

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<sup>590</sup> *Ibid.*

<sup>591</sup> *Ibid* at 24-25.

<sup>592</sup> *Ibid* at 25.

<sup>593</sup> See, for example: Gorovitz Robertson, *supra* note 3 at 1079-1080; Glass Geltman, *Recycling Land*, *supra* note 15 at 8; and Hara, "Correcting Market Failures", *supra* note 24 at §10.14-10.15.

<sup>594</sup> NRTEE, *Cleaning Up the Past*, *supra* note 1 at ix-x.

Christopher De Sousa estimates that in the Greater Toronto Area the potential public benefit of brownfield redevelopment could generate between \$37 million to \$55 million per annum, with an overall benefit of between \$4.6 and \$7 billion annually across Canada.<sup>595</sup> Richard DiFrancesco estimates a multiplier effect for brownfields of 3.8, meaning for every dollar of brownfield output there is an additional \$3.80 in output for the whole economy — the highest output multiplier of all sectors of the economy.<sup>596</sup>

In addition to the economic, social and environmental benefits there appears to be general public support for government action. The 2008 Strategic Counsel report to the Federation of Canadian Municipalities indicates there is broad public support to address problems such as roads, affordable housing, public transit, and community safety.<sup>597</sup> With an estimated \$123 billion investment required to restore declining municipal infrastructure across Canada, brownfield cleanup and redevelopment fits not only within the goal of infrastructure repair and improvement but also within the sustainability goal.<sup>598</sup>

Ten years ago, De Sousa complained that it was a “conundrum” why governments across Canada were slow to act on brownfields.<sup>599</sup> That is simply not the case today. There has been positive engagement in cleanup, most notably at the municipal level where local and municipal authorities have used ARPs (or their equivalent) to address contaminated sites as a part of a community-wide revitalization and redevelopment project. In section 3, I discussed how municipal authority over brownfield cleanup and redevelopment can fall under ARPs. Earlier in this section, I discussed the use of ARPs as something less than full command and control regulation but more than a stakeholder consortium, such as Michael Heller’s LADs.<sup>600</sup> ARPs permit the municipal authority to engage in community-wide projects by not only empowering them to take on a

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<sup>595</sup> Christopher De Sousa, “Measuring the public costs and benefits of brownfield versus Greenfield development in the Greater Toronto area” (2002) 29 *Env’t & Planning* 251 at 271 [De Sousa, “Measuring the public costs”] and “Urban brownfields redevelopment in Canada: the role of local government” (2006) 50 *Cdn Geog* 392 at 396. Richard DiFrancesco’s estimates are more modest, representing a national benefit of between \$50 million and \$300 million per year, see: Richard J DiFrancesco, “On the National Macroeconomic Impact of Brownfields Redevelopment Activities” in Abdel-Aziz & Chalifour, *supra* note 24 at §10.210.

<sup>596</sup> DiFrancesco, *ibid* at §10.216. DiFrancesco also estimates that for every one dollar of brownfield output there is a direct \$0.20 in environmental consulting activity and \$0.22 in federal personal tax revenues.

<sup>597</sup> Strategic Counsel, *supra* note 321 at 51-84. Though admittedly, Canadians placed a slightly higher priority on health care over community infrastructure.

<sup>598</sup> *Ibid* at 59.

<sup>599</sup> De Sousa, “Measuring the public costs”, *supra* note 595 at 253.

<sup>600</sup> On Heller’s LADs, see: Heller & Hills, *supra* note 421 at 1488-1497.

revitalization plan for the neighbourhood but also to fund the program through special tax levies.

Placing brownfields within the broad goal of sustainable development shifts the focus away from contamination and toward land redevelopment. Such an approach must not lose sight that not all brownfields are found in a redevelopment zone. Many brownfields are randomly scattered across a city, including abandoned gas stations and former drycleaners. Those “one off” situations still require an overall policy. Edmonton is exploring a policy to address LUSTs. The *Contaminated Gas Stations Task Force Bylaw* establishes a committee of City Council to: (1) develop a plan to address contaminated gas stations; (2) implement the plan; (3) establish partnerships with other municipalities to advocate for legislative changes; (4) discuss with federal and provincial authorities and industry leaders funding needs; and (5) advocate the City’s position.<sup>601</sup> The Task Force may very well find that to adequately address the LUST problem, greater regulatory authority over toxic releases needs to be downloaded onto municipal authorities, particularly where Alberta Environment refuses to issue EPOs and lacks the capacity to adequately investigate those sites.

### 3.5. Conclusion

First, to improve information on brownfields requires capacity building. Regulators and potential purchasers of the land must be informed, not only about the condition of the site but also as to the technologies needed to clean up the site. The expertise and technical facilities to assess a brownfield are sparse and expensive. Better information should reduce transaction costs and encourage more sales of brownfields. In addition, a more streamlined administrative process should also reduce transaction costs. Better, simplified guidelines should also encourage more sales of brownfields. The government needs to invest in tools that improve information and reduce information asymmetries between parties.

Second, structural inadequacies also plague brownfield cleanup and redevelopment efforts. The hold out problem, which we described in section 2, results in less sales of brownfields occurring than at the socially optimal level. In order to move the right to use the land, and to shift brownfields to a higher use, government authorities may choose from a range of command and control instruments or strategies, market-based tools or incentive programs. The most effective, as thus far the most used tool, has been the ARP which has allowed municipal authorities both the administrative authority to redevelop brownfields found within a redevelopment zone and the financial ability to perform the cleanup. Other tools that could be effective are transferability rules, which permit the transfer of liability to the purchaser upon the parties meeting certain qualifications.

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<sup>601</sup> Edmonton, Bylaw 15363, *Contaminated Gas Stations Task Force Bylaw* (21 July 2010).

Finally, certain market-based incentives can assist developers in bringing brownfields to a higher use.

Third, the public choice to cleanup brownfields was explored. There is evidence that the public supports both efforts to improve failing municipal infrastructure and to improve the environmental quality of life in cities. There is also evidence to suggest that brownfield cleanup nets substantial economic, social and environmental gains for the community. Thus, for municipalities to engage in cleanup means an aspect of urban sustainability and often through the use of ARPs, is seen as a valuable way to demonstrate the usefulness of brownfield cleanup to the community.

## 4. Recommendations

To summarize the recommendations made in this paper:

- 1) The discussion should move away from the attribution of blame. Traditionally, the PPP and the BPP have been the guideposts for assessing responsibility for cleanup. This inevitably leads to the blame game for contamination and contributes to the market failure for brownfields, where owners hold out and potential developers avoid brownfields. Historic contamination is everyone's problem and everyone's responsibility. If underutilized value in brownfields is to be realized, it becomes necessary to re-examine the root cause of brownfield market failure and to consider strategies better designed to encourage the transfer of land in a fair and efficient manner.
- 2) Municipalities have the most to gain from revitalized urban communities. However, municipalities have limited regulatory authority over contamination issues. The provincial authority, and to a lesser extent, the federal authority have the greatest legislative power to address brownfields. The municipal tool most adaptable to addressing brownfields is the ARP. It allows a municipality to address brownfields within the context of neighbourhood-wide redevelopment programs. It also allows municipalities to expropriate contaminated sites and to fund some of the cleanup costs. To this end, ARPs may be the best solution for bringing brownfields back into productive use. Both the provincial and federal authorities are encouraged to shift authority to municipalities, so that one regulatory authority has the power to deal with contaminated sites in an effective manner.
- 3) This paper recommends the adoption of transferability rules. Transferability rules, which would permit the transfer of liability from a vendor to a purchaser, may encourage the owners of brownfields to sell contaminated land to a willing developer. The responsibility for remediation and the costs of cleanup are passed on to the purchaser. The purchaser assumes responsibility for the cleanup. Government authorities can take some comfort that adequate remediation efforts



will be performed if the purchaser gives adequate assurances, assumes liability, and is properly bonded or insured.

- 4) There is still a need for better information on the location and the extent of contaminated lands. This paper recommends efforts to make publicly available information on current brownfield sites and any test data. A site registry system would provide information on a site to vendors, purchasers, government authorities, and the public at large. The most useful site registry system would be one connected to the land titles system.
- 5) There is also a need for the necessary expertise to adequately assess and remediate brownfields. Regulatory delays are a transaction cost. Better informed and trained regulators may minimize those transaction costs. Moreover, a better informed public is better able to respond to the brownfield problem, making it easier to move brownfields lands to higher and better uses.
- 6) Government assistance for particularly difficult brownfields should continue. This may take on the form of direct subsidies, such as those used for the removal of LUSTs, or tax incentives that offset the cost of testing and remediation.

While these recommendations are not a definitive, they do represent a practical start to addressing this problem in Alberta. If policy makers are serious about bringing blighted lands back to better and higher uses and encouraging the revitalization of urban communities, then these recommendations should be carefully considered.



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