

**BARRIERS TO COLLABORATION:
ORPHANED/ABANDONED MINES IN CANADA**

FINAL REPORT

Prepared for the:

**NATIONAL ORPHANED/ABANDONED MINES ADVISORY
COMMITTEE**

of the

NATIONAL ORPHANED/ABANDONED MINES INITIATIVE

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**SUBMITTED
TO THE
BARRIERS TO COLLABORATION TASK GROUP**

**OF THE
NATIONAL ORPHANED/ABANDONED MINES INITIATIVE**

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The purpose of this document is to provide the reader with an understanding of various approaches, within a regulatory context, for voluntary clean-up of orphaned/abandoned mine lands in Canada. The information provided is based on the opinions of the author, and should not be construed as endorsement in whole or in part by the various reviewers or by the partners in the Orphaned/Abandoned Mines Initiative (the Government of Canada, Provincial Governments, the Mining Association of Canada, contributing mining companies and mining associations, the Assembly of First Nations and participating non-governmental organizations).

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EXECUTIVE SUMMARY

Orphaned or abandoned mines for which the owner cannot be found, or for which the owner is financially unable to carry out clean-up, pose environmental, health, safety, and economic problems to communities, the mining industry, and governments in many countries including Canada. This paper has examined existing legislative requirements in Canada, selected other North American jurisdictions, and other countries on:

1. regulatory or institutional barriers;
2. liability disincentives, and
3. collaborative opportunities

regarding voluntary abatement, remediation, and reclamation of orphaned/abandoned mine lands. In addressing the above three matters, particular emphasis was placed on four approaches:

1. 'Good Samaritan' legislation;
2. Permit blocking;
3. Allocative versus joint and several responsibility; and
4. Non-compliance registries.

Part II of the paper provided a brief background to the orphaned/abandoned mines problem. The review noted that orphaned or abandoned mine sites are generally defined as closed mines whose ownership has reverted to the Crown, either because the owner has gone out of business, or because no owner can be found. They also are described as mine sites where the owner has ceased or indefinitely suspended advanced exploration, mining, or mine production without rehabilitating the site. The paper summarized the impacts of such sites on the environment and the fact that no country appears to be immune from the problem. Finally, this part of the paper also noted that the problem requires both financial and legal solutions.

Part III reviewed existing legislative requirements in Canada, selected other North American jurisdictions, and other countries in regard to the above three matters. In general, there is no existing or proposed federal or provincial legislation in Canada regarding the subject of good samaritan legislation, though there may be some statutory developments that could be said to be analogous to, or precedents for, such legislation. Some existing law implicitly, though not explicitly, may have the same effect as permit blocking. Finally, there is some law, policy, and practice in existence regarding non-compliance registries and allocative versus joint and several liability. In comparison, there appear to be many more legislative measures in place or proposed at the federal and state level in the United States addressing explicitly several of these subjects. National legislation in the United Kingdom and state legislation in Australia is comparatively in its infancy in addressing these matters.

Part IV summarized key findings that arise in relation to each of the above three matters. Generally, in regard to regulatory or institutional barriers, federal and provincial environmental and mining laws in Canada contain a number of permit, regulation, and other requirements that likely would have to be complied with by those voluntarily undertaking abandoned mine land abatement, remediation, and reclamation. Existing exemption or variance authority under a number of these laws may be available to accommodate such activities, though the generality of the statutory language under many laws reviewed makes this difficult to predict with certainty. For a complete list of findings regard should be had to Part IV.A.

In regard to liability disincentives, federal and provincial law in Canada contains a variety of judge-made and statutory authorities that could impose quasi-criminal, civil, or administrative liability on those undertaking abandoned mine land abatement, remediation, and reclamation activities. There are some limited exceptions to this, such as potential exemptions from liability for historic mine site reclamation very recently enacted in one province. There also are some statutory authorities, such as secured creditor and related exemptions, that might serve as precedents for exempting from liability those who volunteer to abate, remediate, and reclaim abandoned mine lands. For a complete list of findings regard should be had to Part IV.B.

In regard to collaborative opportunities, a number of voluntary assessments and abandoned mine land cleanups have been completed, or are on-going, by provincial governments in Canada. These initiatives have been undertaken without legislative reform. Other collaborative opportunities include variance authority, precedents arising from secured creditor exemptions, and related approaches. For a complete list of findings regard should be had to Part IV.C.

Overall, however, the current legislative and regulatory regime in Canada is at best a patch-work, at worst indifferent to the problem. In most instances, legislators simply have not turned their attention to orphaned/abandoned mines to produce a principled and comprehensive solution to the problem. Some current laws are broadly worded in terms of providing regulation-making authority that could be a basis for measures that could facilitate voluntary cleanups without requiring amendments to existing legislation. However, the better view may be that both the Parliament of Canada and provincial legislatures also will have to speak directly to the problem.

Based on the review there are some precedents to be drawn from that provide a basis for recommendations that might be of assistance to the Task Group. These recommendations are premised on the view that either existing legislation will have to be amended one law at a time (as in an omnibus bill), or that a single stand-alone law will need to be enacted that has the same effect. Accordingly, Part V contains a short list of possible components or options for a federal and provincial legislative/regulatory approach to facilitating voluntary abandoned mine land abatement, remediation, and reclamation. These include:

- Amend existing or enact new law that encourages volunteers to abate, remediate, and reclaim abandoned mine lands,

- Exempt volunteers from being “responsible persons” under contaminated site, water pollution, or related laws as a result of carrying out “good samaritan” remediation,
- Establish an abandoned mine reclamation “good samaritan” permit program, which would require permittees to specify reclamation plans and meet certain standards for cleanup, ensure public participation, and environment ministry oversight of cleanups,
- Require remining operators to implement strategies that control pollutant releases and ensure that pollutant discharges during remining activities are less than the pollutant levels released from the abandoned site prior to remining,
- Create exemptions from remediation liability at “historic mine sites”, and
- Adoption of collaborative opportunities under federal and provincial environmental and mining laws in Canada.

Finally, these proposals should be considered in conjunction with other measures that are outside the scope of this report (e.g. abandoned mine land funds, more effective security deposits, etc.), but also appear to be integral to development of a comprehensive response to the abandoned mine land problem in Canada.

I. RÉSUMÉ

Les mines orphelines ou abandonnées dont les propriétaires sont introuvables, ou dont les propriétaires n'ont pas les ressources financières permettant de procéder à la restauration, posent aux collectivités, à l'industrie minière et aux gouvernements de plusieurs pays, y compris le Canada, des problèmes dans les domaines de l'environnement, de la santé, de la sécurité et de l'économie. La présente étude examine les exigences législatives qui existent au Canada, dans certaines autres juridictions en Amérique du Nord et dans d'autres pays :

1. quant aux obstacles d'ordre réglementaire ou institutionnel
2. quant aux responsabilités non incitatives
3. quant aux possibilités de collaboration

concernant la réhabilitation volontaire des mines orphelines/abandonnées de même que leur restauration et leur remise en état. Dans l'examen des trois questions mentionnées précédemment, quatre solutions ont été privilégiées :

1. la loi du bon samaritain
2. le gel de permis
3. la répartition de la responsabilité par rapport à la responsabilité unique
4. les registres sur la non-conformité.

La Partie II de l'étude donne un bref aperçu du problème que posent les mines orphelines/abandonnées. L'examen relève que les sites miniers orphelins/abandonnés sont généralement décrits comme des mines fermées dont la propriété est retournée à la Couronne, soit parce que le propriétaire a été dissous, soit parce qu'il est introuvable. Il peut également s'agir de sites miniers pour lesquels le propriétaire a cessé ou interrompu indéfiniment l'exploration avancée, l'extraction ou la production sans avoir restauré les lieux. L'étude résume les effets que ces sites ont sur l'environnement et le fait qu'aucun pays ne semble être à l'abri de ce problème. Enfin, cette partie de l'étude relève également que le problème exige des solutions sur les plans financier et juridique.

La Partie III de l'étude examine les exigences législatives qui existent au Canada, dans certaines autres juridictions de l'Amérique du Nord et dans d'autres pays à l'égard des trois questions mentionnées au début. En général, il n'existe au Canada aucune loi fédérale ou provinciale, ni de projet de loi, dans lesquels il est question de loi du bon samaritain, bien que certaines nouvelles dispositions puissent être considérées comme analogues ou servir de base. Il existe certaines lois qui implicitement peuvent avoir le même effet qu'un gel de permis, mais aucune ne le prévoit expressément. Enfin, il existe certaines lois, politiques et pratiques qui concernent les registres sur la non-conformité et la répartition de la responsabilité par rapport à la responsabilité unique. Comparativement, il semble y avoir beaucoup plus de mesures législatives ou de projets de loi aux États-Unis, tant au niveau fédéral qu'au niveau des États, qui traitent expressément de plusieurs de ces sujets. La législation nationale du Royaume-Uni et les

lois adoptées par les États de l'Australie ne font, en comparaison, que commencer à se pencher sur ces problèmes.

La Partie IV de l'étude résume les principales conclusions qui ont été dégagées relativement à chacun des trois problèmes mentionnés précédemment. En général, pour ce qui est des obstacles d'ordre réglementaire ou institutionnel, la législation minière et environnementale, tant au niveau provincial que fédéral, prévoit l'obligation d'obtenir des permis, de se conformer aux règlements et d'autres obligations auxquelles devront probablement se conformer les personnes qui volontairement réduiront les impacts des sites miniers abandonnés, les restaureront, et les remettront en état. De telles activités pourraient être autorisées en vertu des exemptions ou dérogations que prévoient bon nombre de ces lois, mais en raison du libellé général qu'on y retrouve souvent, le résultat est difficile à prévoir avec certitude. Pour la liste complète des conclusions, il faut examiner la Partie IV.A.

Quant aux responsabilités non incitatives, le droit canadien de niveau fédéral et provincial contient diverses dispositions issues de la jurisprudence ou de la loi qui peuvent imposer une responsabilité de nature quasi-criminelle, civile ou administrative aux personnes qui réduiront les impacts des sites miniers abandonnés, les restaureront ou les remettront en état. Certaines exceptions, récemment édictée dans une province, s'appliquent : par exemple, la possibilité d'être exempté de toute responsabilité pour avoir restauré un site minier historique. Certains organismes statutaires tels que les créanciers garantis et autres exceptions reliées, peuvent servir de précédents pour exempter de toute responsabilité les personnes qui, de façon volontaire, réduisent les impacts des sites miniers abandonnés, les restaurent ou les remettent en état. Pour la liste complète des conclusions, il faut examiner la Partie IV.B.

En ce qui concerne les possibilités de collaboration, des gouvernements provinciaux au Canada ont volontairement procédé à de nombreuses évaluations et ont restauré des sites miniers abandonnés, ou continuent de le faire. Ils ont pris ces initiatives sans qu'une réforme législative ne soit entreprise. D'autres possibilités de collaboration comprennent notamment la dérogation aux règles établies, les précédents découlant de l'exemption applicable aux créanciers garantis et de démarches connexes. Pour la liste complète des conclusions, il faut examiner la Partie IV.C.

Toutefois, dans l'ensemble, la législation et la réglementation actuellement en place au Canada donne tout au plus une solution de rapiécage au problème ou rien du tout. Dans la plupart des cas, les législateurs ne se sont pas attardés à trouver une solution durable au problème. Certaines lois actuelles prévoient, en termes généraux, un pouvoir de réglementation sur lequel pourraient se fonder des mesures pouvant favoriser la restauration volontaire sans qu'il soit nécessaire de modifier les lois déjà existantes. Toutefois, il est peut-être préférable que le Parlement du Canada et les assemblées législatives des provinces attaquent ensemble le problème de front.

Selon l'étude, il est possible de s'inspirer de certains précédents pour étayer des recommandations qui pourraient être utiles au groupe de travail. Ces recommandations se

fondent sur deux prémisses : les lois existantes doivent être modifiées une à la fois (comme dans le cas d'un projet de loi omnibus) ou une seule loi autonome ayant le même effet doit être édictée. En conséquence, la Partie V fait une brève énumération des éléments ou options qui permettraient d'adopter une démarche sur le plan législatif/réglementaire fédéral et provincial visant à favoriser la réduction volontaire des impacts des sites miniers abandonnés, de même que leur restauration et leur remise en état. Voici certains de ces éléments :

- Modifier les lois ou en promulguer de nouvelles de manière à encourager les personnes à réaliser volontairement des travaux afin de réduire l'impact des sites miniers abandonnés, à les restaurer et les remettre en état;
- Exempter de toute responsabilité environnementale les personnes qui, en vertu de la loi applicable aux sites contaminés, à la pollution des eaux et à d'autres dispositions connexes, pourraient être tenus responsables après avoir restauré un site à titre de bons samaritains;
- Établir, pour la restauration des sites miniers abandonnés, un programme de délivrance de permis du type "bon samaritain" qui imposerait aux titulaires du permis de préciser les plans de restauration et de satisfaire à certaines normes de réhabilitation, qui assurerait la participation du public et veillerait à ce que le ministère de l'Environnement assure le suivi de la restauration;
- Imposer aux exploitants responsables de la réouverture d'une mine abandonnée de mettre en oeuvre des stratégies pour contrôler l'émission de polluants et pour veiller à ce que le rejet de polluants se situe, au cours des activités liées à la réouverture de cette mine, à un niveau plus bas que celui qu'émettait le site abandonné avant sa réouverture;
- Exempter de toute responsabilité environnementale celui qui remet en état les sites abandonnés "historiques";
- Prévoir des possibilités de collaboration dans la législation minière et environnementale du Canada, tant au niveau fédéral que provincial.

Enfin, il y a lieu de considérer ces propositions en tenant compte d'autres mesures qui dépassent le mandat de ce rapport (par ex., les fonds relatifs aux sites miniers abandonnés, des dépôts de garantie plus appropriés, etc.), mais qui semblent faire partie intégrante du développement d'une réponse globale et durable au problème des mines abandonnées au Canada.

BARRIERS TO COLLABORATION: ORPHANED/ABANDONED MINES IN CANADA

Joseph F. Castrilli*

I.	INTRODUCTION.....	2
II.	BACKGROUND TO THE ORPHANED/ABANDONED MINES PROBLEM	3
III.	SUMMARY REVIEW OF EXISTING LEGISLATIVE REQUIREMENTS IN CANADA, SELECTED OTHER NORTH AMERICAN JURISDICTIONS, AND OTHER COUNTRIES	5
A.	CANADA.....	6
1.	<i>Federal</i>	6
a.	Natural Resource Management Laws in Northern Canada	6
b.	Federal Environmental Regulatory Laws.....	8
i.	Fisheries Act	8
ii.	Canadian Environmental Protection Act, 1999.....	10
c.	Federal Environmental Management Laws.....	12
d.	Federal Environmental Liability Protection Under Bankruptcy and Insolvency Law	14
e.	Summary	15
2.	<i>Provincial</i>	17
a.	Common Law Regime in Canada	17
b.	Civil Law Regime in Canada	19
c.	Provincial Environmental Laws	19
i.	Western Provinces	20
ii.	Central Canada	30
iii.	Maritime Provinces	34
iv.	Summary	37
d.	Provincial Mining Laws	39
i.	Western Provinces	39
ii.	Central Canada	44
iii.	Maritime Provinces	46
iv.	Summary	48
B.	UNITED STATES.....	50
1.	<i>Federal</i>	50
a.	Federal Surface Mining Law	50
b.	Federal Clean Water Law	51
c.	Federal Hazardous Waste Laws	53
d.	Bills Proposed in Congress.....	55
2.	<i>State</i>	56
a.	State Permit Blocking Law	56
b.	State Good Samaritan Law	56
C.	OTHER COUNTRIES	57
1.	<i>United Kingdom</i>	57
2.	<i>Australia</i>	58
IV.	KEY FINDINGS REGARDING REGULATORY AND INSTITUTIONAL BARRIERS, LIABILITY DISINCENTIVES, AND COLLABORATIVE OPPORTUNITIES IN CANADA.....	58
A.	REGULATORY AND INSTITUTIONAL BARRIERS.....	59
B.	LIABILITY DISINCENTIVES.....	61
C.	COLLABORATIVE OPPORTUNITIES.....	62
V.	CONCLUSIONS AND RECOMMENDATIONS.....	64

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II. INTRODUCTION

Orphaned or abandoned mines for which the owner cannot be found, or for which the owner is financially unable to carry out clean-up, pose environmental, health, safety, and economic problems to communities, the mining industry, and governments in many countries including Canada.

In June 2001, a multi-stakeholder workshop was held in Winnipeg, Manitoba to review the issue of orphaned/abandoned mines in Canada. A September 2001 Mines Ministers Conference resulted in an Action Plan and establishment of a national multi-stakeholder advisory committee on Orphaned/Abandoned Mines. The Advisory Committee has created three Task Groups, of which one is designed to address the issue of legislative "Barriers to Collaboration" in solving the orphaned/abandoned mine problem. The objective of the Barriers to Collaboration Task Group, and upon which it must report to the Mines Ministers Conference in September 2002, is:

"to evaluate the efficacy of various approaches, including 'Good Samaritan' legislation,¹ permit blocking,² non-compliance registries,³ and allocative versus joint and several liability."⁴

The purpose of this paper is to examine the above four approaches in the context of three matters relating to voluntary cleanup (defined as abatement,⁵ remediation,⁶ and reclamation⁷) of orphaned/abandoned mine lands in Canada. First, whether there are

¹ Legislation that allows voluntary cleanups of abandoned mines in return for protection from liability for post-cleanup discharges as long as (1) they are not worse than pre-cleanup discharges and, (2) the volunteer was not responsible for creating the problem in first instance.

² Permit blocking refers to the refusal of a regulatory authority to issue a permit under mining legislation where the applicant, or any person who owns or controls the applicant, is currently in violation of applicable law. Usually, before a permit block may be employed the applicant also must not be pursuing in good faith either administrative or judicial appeal of an adverse determination, or abatement of the violation to the satisfaction of the issuing authority.

³ Non-compliance registries are an increasingly typical approach to compliance assurance. General environmental non-compliance lists have been issued annually in jurisdictions such as Alberta and British Columbia. Most recently, non-compliance registries are being considered in the context of the Kyoto Protocol.

⁴ Allocative liability assigns liability and the obligation to provide compensation on the basis of level of contribution to the problem. Joint and several liability assigns one hundred percent of the liability and obligation to provide compensation to each person found liable for the problem. The latter type of liability is associated, for example, with Superfund legislation in the United States.

⁵ "Abatement" as used in this paper will refer to the reduction, decrease, or diminution of direct pollution discharges, or overland runoff from an abandoned mine land area to bodies of water including lakes, rivers, and watercourses.

⁶ "Remediation" as used in this paper will refer to the process of improving environmental conditions and reducing environmental risks from abandoned mine land areas through decontamination of soil, sediment, and groundwater and removing or treating mine wastes, tailings, or leached materials.

⁷ "Reclamation" as used in this paper will refer to the process of returning abandoned mine land areas to productive post-mining land use, and includes the process of reducing public safety hazards posed by such sites. "Rehabilitation" as used in this paper has the same meaning.

regulatory or institutional barriers to such third-party collaboration in cleaning up orphaned/abandoned mines. Second, whether there are liability disincentives to such collaboration. Third, whether there are opportunities for collaboration in effectuating such cleanups.

In this regard, Part II of the paper provides a brief background to the orphaned/abandoned mines problem. Part III provides a review of existing legislative requirements in Canada, selected other North American jurisdictions, and other countries in regard to the above three matters. Part IV summarizes key findings that arise in relation to each of the above three matters. Part V of the paper provides conclusions and recommendations.

III. BACKGROUND TO THE ORPHANED/ABANDONED MINES PROBLEM

Orphaned or abandoned mine sites are generally defined as closed mines whose ownership has reverted to the Crown, either because the owner has gone out of business, or as is the case with some historic properties, because no owner can be found. They also are described as mine sites where the owner has ceased or indefinitely suspended advanced exploration, mining, or mine production without rehabilitating the site.⁸

According to a June 2001 United Nations Environment Programme ("UNEP") sponsored report the impact of abandoned mines can include:

- Altered landscape; unused pits and shafts; land no longer useable due to loss of soil, pH, slope of land; abandoned tailings dumps; changes in groundwater regime; contaminated soils and aquatic sediments; subsidence; and vegetation changes.

The report notes further that the results of such impacts can cause:

- Loss of productive land; loss or degradation of groundwater; pollution of surface water by sediment or salts; fish affected by contaminated sediments; changes in river regimes; air pollution from dust or toxic gases; risks of falls into shafts and pits; and landslides.

Accordingly, the report observes that:

"In addition to the obvious problems for [a] community, most of these situations represent a considerable cost to public authorities which are often expected to make the sites secure and prevent ongoing pollution. The public is increasingly demanding action and this visible legacy of the past is producing growing community opposition to current mining activities. The orphan sites problem therefore continues to cast a shadow over all

⁸ Mining Association of Canada, *Orphaned/Abandoned Mines in Canada: Fact Sheet* (Ottawa: MAC, 2001) at 1.

mining at a time when major operators are improving their operations and are trying to improve the image of their sites and their company."⁹

No country appears to be immune from the problems posed by orphaned or abandoned mines. The UNEP report notes the following examples:

- Acid drainage from abandoned mines in the United Kingdom has severely contaminated local streams. The cost of water treatment for ongoing drainage discharges is considerable and, as a result, only a few treatment plants are operating.
- Abandoned pits and shafts over a large area of uncontrolled past alluvial mining in West African countries poses a serious public safety risk to local people and animals.
- Large areas of dryland forest in Australia damaged during the 1860s gold rush still have not recovered. The land areas have virtually no topsoil, vegetation is sparse, and the trees stunted. Over 150 tonnes of mercury lost to the environment from these digging operations continues to contaminate sediments in coastal areas causing health authorities to advise local populations to limit fish consumption.
- A number of major mine sites in the United States are listed as "Superfund" sites due to the extensive contamination from materials and exposed orebodies left behind.¹⁰

The UNEP report also noted that the fundamental issues in solving the orphaned/abandoned mine problem were financial and legal.¹¹ Indeed, in some jurisdictions such as the United States, it is recognized that abandoned mines are responsible for water quality impairment throughout the western part of the country.¹² However, existing U.S. law has been interpreted as imposing an obligation on any one coming forward to solve the problem as inheriting the obligation for post-cleanup discharges even where they were not responsible for creating the original problem.¹³ As a

⁹ United Nations Environment Programme, *Abandoned Mines - Problems, Issues and Policy Challenges for Decision Makers: Summary Report* (2001) at 16.

¹⁰ *Ibid.* at 15.

¹¹ *Ibid.* at 11.

¹² Western Governors' Association, *WGA Policy Resolution 01-15: Cleaning Up Abandoned Mines* (Denver: WGA, 2001) at 1.

¹³ See *Committee to Save Mokelumme River v. East Bay Municipal Utility District*, 13 F.3d 305 (9th Cir. 1993), *cert. denied*, 115 S. Ct. 1998 (1994). See also S. A. Crozier, "The Abandoned Mine Land Initiative: Regulatory Impediments and Policy Options" (1997) [unpublished, on file with the author] (noting that the activities of the defendant utility district and regional water quality board were remedial actions in response to an environmental risk posed by acid mine drainage from abandoned mine lands in California. Nonetheless, the Ninth Circuit Court of Appeals concluded that such actions were subject to permit requirements under the *Clean Water Act* of the United States) at 9-10.

result, a number of bills have been proposed in Congress that would provide protection from liability for "Good Samaritan" cleanups of abandoned mines.¹⁴

In Canada, non-governmental surveys have identified approximately 10,000 abandoned mines across the country.¹⁵ Various provinces are in the process of assessing the status of abandoned mines in their jurisdiction,¹⁶ or beginning the process of rehabilitation.¹⁷ At the federal level, the Commissioner for Environment and Sustainable Development, Johanne Gelinas, announced recently that the annual report from her office due in October 2002 would focus, among other matters, on how the federal government has managed contaminated sites resulting from abandoned mines in northern Canada.¹⁸

IV. SUMMARY REVIEW OF EXISTING LEGISLATIVE REQUIREMENTS IN CANADA, SELECTED OTHER NORTH AMERICAN JURISDICTIONS, AND OTHER COUNTRIES

This part of the paper provides a review of existing legislative requirements in Canada, selected other North American jurisdictions, and other countries on the issues of regulatory or institutional barriers, liability disincentives, and collaborative opportunities regarding voluntary abatement, remediation, and reclamation of abandoned mine lands.

As will be seen from the review, there is no existing or proposed federal or provincial legislation in Canada regarding the subject of good samaritan legislation, though there may be some statutory developments that could be said to be analogous to, or precedents for, such legislation. Some existing law implicitly, though not explicitly, may have the same effect as permit blocking. Finally, there is some law, policy, and practice in existence regarding non-compliance registries and allocative versus joint and several liability.¹⁹

In comparison, there appear to be many more legislative measures in place or proposed at the federal and state level in the United States addressing explicitly several of these subjects.²⁰

¹⁴ These bills require that for an entity to be protected from liability as a "Good Samaritan" it must not otherwise have been responsible for creation of the abandoned mine problem in first instance.

¹⁵ W.O. MacKasey, *Abandoned Mines in Canada* (Sudbury: WOM Geological Associates, Inc.; 2000) at 3-8 (survey conducted on behalf of Mining Watch Canada identified 10,139 abandoned mines across Canada).

¹⁶ Saskatchewan Environment, News Release, "Assessing Northern Abandoned Mines" (September 18, 2001)(noting release of interim report on the health, safety, and environmental risks of abandoned mines in northern Saskatchewan).

¹⁷ Manitoba Government, News Release, "Province to Begin Process of Rehabilitating Abandoned Mines in Northern Manitoba" (July 18, 2001).

¹⁸ Commissioner of the Environment and Sustainable Development, Opening Statement to the House of Commons Standing Committee on Public Accounts, *2002-2003 Report on Plans and Priorities of the Office of the Auditor General of Canada* (April 25, 2002) at 3.

¹⁹ See Part III.A, below.

²⁰ See Part III.B, below.

Finally, national legislation in the United Kingdom and state legislation in Australia also is comparatively in its infancy in addressing such matters.²¹

A. Canada

The review of Canadian legislation is divided into an examination of federal and provincial environmental and mining laws. Depending on the jurisdiction examined, greater reliance may be placed by government on either or both types of legislation in addressing abandoned mines, to the extent the issue is adverted to at all in such laws.

1. Federal

There are four broad areas of federal law that may be applicable to the issue of abandoned/orphaned mine lands and their abatement, remediation, or reclamation through collaborative processes. First, there is natural resource management legislation applicable predominantly to northern Canada (north of the 60th parallel), and administered by the Department of Indian Affairs and Northern Development ("DIAND"). Second, there is environmental regulatory legislation applicable throughout the country, administered by Environment Canada. Third, there is environmental management legislation applicable throughout the country, administered by Environment Canada. Fourth, there are exemptions from environmental liability contained in federal bankruptcy and insolvency legislation that may constitute a precedent for future legislation assisting voluntary abandoned mine land clean-ups.

a. Natural Resource Management Laws in Northern Canada

In regard to natural resource management laws, there are numerous pieces of federal legislation applicable to mining activity in northern Canada. The existence of several pieces of legislation may give the appearance of either fragmentation of authority or opportunity for innovation in different geographic areas of northern Canada. However, in practice the legislation is the overall responsibility of one federal department (DIAND) and frequently is drafted with very similar provisions regardless of whether the law relates to Nunavut, the MacKenzie Valley, the Yukon, or the Northwest Territories. Federal natural resource management laws applicable to northern Canada include the:

- *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;²²
- *Territorial Lands Act*;²³

²¹ See Part III.C, below.

²² S.C. 2002, c. 10.

²³ R.S.C. 1985, c. T-7. The Act authorizes the federal cabinet to "make regulations respecting the protection, control and use of the surface of territorial lands." *Ibid.*, s. 23(j). Under this statutory enabling authority, the federal government has promulgated the *Territorial Land Use Regulations*, C.R.C., c. 1254,

- *Yukon Waters Act*;²⁴
- *Northwest Territories Waters Act*;²⁵ and
- *MacKenzie Valley Resource Management Act*.²⁶

In general, natural resource management legislation applicable to northern Canada is silent on all four subjects of interest in this study. However, there are a number of provisions contained in more than one of the above identified laws that could apply to abandoned mine land abatement, remediation, and reclamation activity that results in deposit of waste into certain waters.

In general, deposits of wastes into certain northern waters require a licence from a board established under the particular natural resource management statute.²⁷ A board cannot include conditions in a licence relating to the deposit of waste in waters that would violate regulations under these laws.²⁸ In addition, a board cannot issue a licence with conditions that are less stringent than the requirements contained in regulations under the *Canada Water Act* or the *Fisheries Act* that also may be applicable to those waters.²⁹ The effect of these provisions, for example, is to incorporate requirements of the existing *Metal Mining Liquid Effluent Regulations*³⁰ or the new *Metal Mining Effluent Regulations*³¹ (that come into force in December 2002) under the *Fisheries Act* into licences issued under several of the above natural resource laws.³² These requirements could capture abandoned mine land abatement, remediation, and reclamation projects.

There is authority under certain of the natural resource laws to exempt the deposit of waste from requiring a licence if the waste deposited:

1. has no potential for significant adverse environmental effects;
2. would not interfere with existing rights of other water users or waste depositors; and

which require applicants for permits under the Act to develop and obtain approval for land use plans. These plans could be vehicles for volunteers seeking to abate, remediate, or reclaim abandoned mine lands.

²⁴ S.C. 1992, c. 40.

²⁵ S.C. 1992, c. 39.

²⁶ S.C. 1998, c. 25.

²⁷ See, e.g. *Northwest Territories Waters Act*, S.C. 1992, c. 39, s. 9 (prohibiting deposit of waste in certain waters except in accordance with licence issued by Northwest Territories Water Board).

²⁸ *Ibid.*, s. 15(4).

²⁹ *Ibid.*, ss. 15(3)(5).

³⁰ C.R.C., c. 819.

³¹ S.O.R./2002-222.

³² See, e.g. *Yukon Waters Act*, S.C. 1992, c. 40, s. 15(5) (to same effect). See also *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, S.C. 2002, c. 10, s. 73 (to same effect). See further *Mackenzie Valley Resource Management Act*, S.C. 1998, c. 25, s. 60 (a board established for a settlement area has jurisdiction in respect of all uses of water and deposits of waste in the settlement area for which a licence is required under the *Northwest Territories Waters Act*).

3. satisfies criteria set out in the regulations in respect of a mining and milling undertaking.³³

It is unsettled law whether an abandoned mine land abatement, remediation, or reclamation project can be characterized as a "mining or milling undertaking" in the absence of specific statutory or regulatory definitions clarifying the matter. Given the broad generality of the language contained in most of these laws, it is arguable that the jurisdiction exists to apply the licensing requirements of these laws to such projects, or to exempt them from the requirements if they meet the exemption criteria. However, even if the language were interpreted narrowly, and such projects were exempt from licensing requirements under natural resource management laws, the provisions of laws such as the *Fisheries Act* and possibly its regulations could still apply directly to such activities.

b. Federal Environmental Regulatory Laws

There are two primary federal environmental regulatory laws in Canada applicable to mining: (1) the *Fisheries Act*;³⁴ and (2) the *Canadian Environmental Protection Act, 1999* ("*CEPA, 1999*").³⁵ Both laws could apply to abandoned mine land abatement, remediation, and reclamation activities.

i. Fisheries Act

Five aspects of the *Fisheries Act* should be considered as applicable potentially to abandoned mine land abatement, remediation, and reclamation activities. First, there is a prohibition under the statute on carrying out any work or undertaking that results in the harmful alteration, disruption, or destruction of fish habitat.³⁶ Second, there also is a prohibition on the deposit of deleterious substances into water frequented by fish.³⁷ Both of these provisions are subject to a specific statutory defence of due diligence.³⁸ Third, deposit of certain substances into waters frequented by fish is permissible if allowed by regulation.³⁹ Under regulations promulgated by the federal government, liquid effluent discharges from metal mining operations to waters frequented by fish are allowed in certain concentrations and circumstances. These regulations (*Metal Mining Liquid Effluent Regulations*) have been amended and new regulations (*Metal Mining Effluent Regulations*) will come into force in December 2002. Fourth, any project that requires federal authorization to alter fish habitat or that requires modifications following the submission of plans and specifications in connection therewith, subjects the project to environmental assessment requirements under the *Canadian Environmental Assessment*

³³ See, e.g. Northwest Territories Waters Regulations, S.O.R./93-303a, s. 5(1)(a)-(c).

³⁴ R.S.C. 1985, c. F-14.

³⁵ S.C. 1999, c. 33.

³⁶ R.S.C. 1985, c. F-14, s. 35(1).

³⁷ *Ibid.*, s. 36(3).

³⁸ *Ibid.*, s. 78.6.

³⁹ *Ibid.*, s. 36(4)(5).

Act.⁴⁰ Fifth, there is potential joint and several civil liability exposure to both the Crown in Right of Canada or a province, as well as to fishermen for deposits of deleterious substances in waters frequented by fish contrary to the Act that require clean-up or cause loss of income.⁴¹

Certainly, the first, second, fourth and fifth aspects of the *Fisheries Act* identified above could apply to abandoned mine land abatement, remediation, and reclamation activities. With respect to the third aspect, however, it is less clear whether, or to what extent, an abandoned mine land abatement, remediation, and reclamation project could be subject to the new regulations.⁴² The new regulations state that they apply to certain "mines" and "recognized closed mines."⁴³ The new regulations define a "mine" as follows:

"mining or milling facilities that are designed or used to produce a metal or metal concentrate or an ore from which a metal or metal concentrate may be produced or any facilities, including smelters, pelletizing plants, sintering plants, refineries and acid plants, where effluent from the facility is combined with the effluent from mining or milling."⁴⁴

The new regulations define a "recognized closed mine" as a mine for which the owner or operator has:

1. provided written notice of the intention to close the mine to an authorized officer in a province;
2. maintained the mine's rate of production at less than 25% of its design rated capacity for a continuous period of three years starting on the day that the written notice is received by the authorized officer; and
3. conducted a biological monitoring study during the three-year period according to requirements set out elsewhere in the regulations.⁴⁵

The new regulations note further that:

⁴⁰ *Canadian Environmental Assessment Act - Law List Regulations*, S.O.R./94-636, Schedule 1, Part 1 listing ss. 35(2) and 37(2) of the *Fisheries Act* respecting authorizations of, and requiring modifications, plans and specifications in respect to, fish habitat alteration.

⁴¹ *Fisheries Act*, R.S.C. 1985, c. F-14, s. 42.

⁴² The federal government has stated that the existing regulations, the *Metal Mining Liquid Effluent Regulations*, apply to active mines but do not apply to abandoned mines. However, deposits of deleterious substances identified in the regulations from an abandoned mine would be a violation of s. 36(3) of the *Fisheries Act*. Government of Canada, *Response to a Submission on Enforcement Matters under Articles 14 and 15 of the North American Agreement on Environmental Cooperation SEM-98-004 by the Sierra Club of British Columbia, the Environmental Mining Council of British Columbia, and the Taku Wilderness Association* (8 September 1999) at 15-16.

⁴³ S.O.R./2002-222, s. 2(1) (regulations apply to mines and recognized closed mines that exceed certain effluent flow rates, and deposit a deleterious substance in waters frequented by fish).

⁴⁴ *Ibid.*, s. 1(1).

⁴⁵ *Ibid.*, ss. 1(1), 32(1).

1. any deposit from a recognized closed mine is subject to the *Fisheries Act* prohibition on depositing deleterious substances into waters frequented by fish;
2. the authorized officer must be notified in writing without delay if the recognized closed mine reopens; and
3. the authorized officer must be provided with the name and address of both the owner and operator of the recognized closed mine, their parent company, and any change in ownership.⁴⁶

However, the new regulations do not apply in respect of mines that stopped commercial operation before the promulgation of the new regulations, unless they are reopened after the promulgation of the regulations.⁴⁷ ("Commercial operation" is defined by the new regulations as an average rate of production equal to or greater than 25% of the design rated capacity of the mine over a consecutive 90-day period).⁴⁸

Accordingly, it appears that the regime contemplated under the new regulations could apply to an abandoned mine land abatement, remediation, or reclamation project, or aspects thereof, in at least two circumstances. First, if the mine is a "recognized closed mine" depositing deleterious substances in waters frequented by fish, it could be in violation of the Act's deleterious substance prohibition and be subject to prosecution in that regard. Second, the new regulations can apply directly to mines that stopped commercial operations before the coming into force of the new regulations, if they resume operations after the new regulations come into effect. Thus, even if a project designed to abate, remediate, or reclaim an abandoned mine could escape application of the new regulations during the abatement, remediation, or reclamation stages, the resulting reopened mine would be subject to the requirements of the new regulations.

ii. Canadian Environmental Protection Act, 1999

CEPA, 1999 authorizes the federal government to determine whether substances used in commerce and industry are toxic and to restrict or prohibit their introduction, use, and release to the environment primarily through regulations promulgated on a substance-by-substance basis.⁴⁹ A number of substances important to the mining industry have been placed in a schedule of toxic substances under the Act (Schedule 1) and been made subject to regulation on an industry sector specific basis with respect to air

⁴⁶ *Ibid.*, ss. 32(2)(3), 33.

⁴⁷ *Ibid.*, s. 2(2).

⁴⁸ *Ibid.*, s. 1(1).

⁴⁹ S.C. 1999, c. 33, Part 5 (controlling toxic substances).

emissions. These include air emissions of lead from secondary lead smelter operations⁵⁰ and air emissions of asbestos from asbestos mines and mills.⁵¹

Other substances of importance to the mining industry (e.g. arsenic, cadmium, and nickel) also have been placed in the toxic substance schedule to the Act but have yet to be subject to regulations controlling or restricting releases (either on an industry sector specific basis or generally).⁵² Accordingly, whether, and if so to what extent and under what circumstances, release of such substances, particularly to water, could be made subject to the requirements of the Act generally, or in the context of an abandoned mine land abatement, remediation, or reclamation project, remains to be seen.

CEPA, 1999 does not establish a licensing, permitting, or approval regime in relation to control of toxic substances. However, the Act does authorize the Minister of the Environment to issue a notice to persons described in the notice requiring them to prepare and implement a pollution prevention plan in respect of toxic substances listed in Schedule 1 to the Act. The notice may specify such matters as the:

- substance(s) in relation to which the plan must be prepared;
- commercial, manufacturing, processing, or other activity in relation to which the plan is to be prepared;
- factors to be considered in preparing the plan;
- period within which the plan is to be prepared; and
- period within which the plan is to be implemented.⁵³

Where a person has prepared or implemented a pollution prevention plan on a voluntary basis or for another government or under another federal law that meets all or some of the above notice requirements, the person may use this other plan for the purpose of meeting *CEPA, 1999*.⁵⁴

As noted above, there are three substances identified in Schedule 1 of *CEPA, 1999* (i.e. arsenic, cadmium, and nickel) with the potential to be released to the environment from mine land areas. These substances have not, to date, otherwise been made subject to release regulations under the Act. Accordingly, these substances could be candidates for the development of pollution prevention plans, or their equivalent, in future. If this occurs, abatement, remediation, and reclamation of abandoned mine lands could be made subject to such plans as "processing, or other activity."

In the event that such substances/activities become subject to regulations and/or pollution prevention plans there are a variety of enforcement options available to Environment Canada in the case of violations of *CEPA, 1999*. These include: (1) issuing

⁵⁰ *Secondary Lead Smelter Release Regulations*, S.O.R./91-155 (releases to air of lead).

⁵¹ *Asbestos Mines and Mills Release Regulations*, S.O.R./90-341 (releases to air of asbestos fibres).

⁵² S.C. 1999, c. 33, Schedule 1, items 28 (arsenic), 31 (cadmium), and 42 (nickel).

⁵³ *Ibid.*, s. 56. Substances in Canada that are a source of international air or water pollution, or that violate international agreements binding on Canada, also may be the subject of pollution prevention plans, even if they are not listed in Schedule 1. *Ibid.*, ss. 56, 166(1), 176(1).

⁵⁴ *Ibid.*, s. 57.

various orders,⁵⁵ (2) imposing measures,⁵⁶ (3) undertaking prosecutions,⁵⁷ and (4) holding officers, directors, and agents of corporations liable for offences committed under the Act.⁵⁸

c. Federal Environmental Management Laws

Currently, federal environmental management measures are reflected primarily in environmental impact assessment law. Prospectively, such measures may be augmented by endangered species legislation. In certain circumstances, both types of law may have application to abandoned mine land abatement, remediation, and reclamation activity.

Environmental impact assessment is regarded as a planning tool that requires early identification and evaluation of all potential environmental consequences of a proposed project and its alternatives, combined with a decision-making process that attempts to reconcile any approval of the proposal with environmental protection and preservation.⁵⁹ The *Canadian Environmental Assessment Act* ("CEAA") requires that an environmental assessment be conducted where a federal authority, called a responsible authority, under the statute:

1. acts as the proponent of a project;
2. pays for the project or provides financial assistance;
3. disposes of federal land by sale, lease, or other means to enable the project to proceed; or
4. exercises a prescribed regulatory duty such as issuing a permit, licence, or approval for the project.⁶⁰

Projects are defined under *CEAA* as "physical works" or "physical activities."⁶¹ Physical works are subject to *CEAA* unless exempted.⁶² Physical activities are not subject

⁵⁵ *Ibid.*, ss. 94 (interim orders), 234 (environmental protection compliance orders).

⁵⁶ *Ibid.*, ss. 99 (remedial measures), 295-309 (environmental protection alternative measures).

⁵⁷ *Ibid.*, ss. 272-276.

⁵⁸ *Ibid.*, s. 280.

⁵⁹ *Friends of the Oldman River v. Canada*, [1992] 1 S.C.R. 3, 71.

⁶⁰ *Canadian Environmental Assessment Act*, S.C. 1992, c. 37, s. 5 [hereinafter *CEAA*].

⁶¹ *Ibid.*, s. 2(1).

⁶² *Ibid.*, ss. 5, 7. A physical work includes any proposed construction, operation, modification, decommissioning, abandonment or other undertaking in relation to that physical work. *Ibid.*, s. 2(1). A physical work may be exempted from the application of *CEAA* by the *Exclusion List Regulations*, S.O.R./94-639, or if the project is to be carried out in response to an emergency. Other the physical work is a project subject to *CEAA*.

to *CEAA* unless they are designated.⁶³ Regulations under *CEAA* determine which types of projects will be assessed and the level of environmental assessment required.⁶⁴

Perhaps the most important of regulations in the context of the subject matter of this study are the *Law List Regulations*, which contain provisions from numerous federal statutes that will trigger a requirement to perform an environmental assessment.⁶⁵ Several provisions of the *Fisheries Act* are listed in this regulation. As noted above, any project that requires federal authorization to alter fish habitat or that requires modifications following the submission of plans and specifications in connection therewith under the *Fisheries Act*, subjects the project to environmental assessment requirements under *CEAA*.⁶⁶ Accordingly, these *Fisheries Act* triggers could result in the application of *CEAA* to abandoned mine land abatement, remediation, and reclamation activities. (In practice, this may be unlikely because fish habitat at mining sites may have ceased to exist by the time cleanup might be due to occur. Indeed, if fish habitat had existed at a site, prior authorizations under the *Fisheries Act* likely would have allowed its destruction to accommodate the mining activity).

Failure to comply with certain requirements of the Act may subject the proponent of the activity to ministerial orders,⁶⁷ court injunctions,⁶⁸ or both.

A new version of *CEAA* (Bill C-19) currently is before Parliament.⁶⁹

Bill C-5, the *Species at Risk Act* ("SARA"), recently passed by the House of Commons⁷⁰ and now being considered by the Senate, also constitutes a form of environmental management regime that, in certain circumstances, could apply to abandoned mine land abatement, remediation, and reclamation activities. *SARA* would prohibit the killing of extirpated, endangered, or threatened species and the destruction of their residences;⁷¹ provide authority to prohibit destruction of critical habitat of listed

⁶³ *CEAA*, s. 59(b). A physical activity includes any activity that does not relate to a prescribed physical work designated under s. 59(b). Physical activities designated by the *Inclusion List Regulations*, S.O.R./94-637, are projects under *CEAA*.

⁶⁴ Besides the *Exclusion List Regulations* and the *Inclusion List Regulations* there are also the *Comprehensive Study List Regulations*. S.O.R./94-638. These regulations designate projects by category that are likely to have significant adverse environmental effects and for which the most rigorous environmental study will be required. Several types of major mining and mineral processing projects are identified under these regulations. *Ibid.*, ss. 16-18. The provisions apply to the proposed establishment, expansion, construction, decommissioning, or abandonment of metal, gold, potash, and other categories of mines, as well as metal mills.

⁶⁵ *Law List Regulations*, S.O.R./94-636.

⁶⁶ *Supra* note 40.

⁶⁷ *CEAA*, S.C. 1992, c. 37, s. 50.

⁶⁸ *Ibid.*, s. 51.

⁶⁹ Bill C-19, *An Act to Amend the Canadian Environmental Assessment Act*, 1st Sess., 37th Parl., 2001 (1st reading 20 March 2001).

⁷⁰ Bill C-5, *An Act respecting the protection of wildlife species at risk in Canada*, 1st Sess., 37th Parl., 2001-2002 (passed by the House of Commons 11 June 2002) [hereinafter *Species at Risk Act* or *SARA*].

⁷¹ *Ibid.*, ss. 32-33. "Residences" includes dwelling place, den, or nest.

species;⁷² and authorize development of recovery planning and actions plans for listed wildlife species at risk.⁷³

While the parameters of this legislation and its relationship to other federal environmental laws are still somewhat unclear, there is the potential for certain provisions of *SARA* to be listed in the *CEAA Law List Regulations*. Consequently, these provisions, like those under the *Fisheries Act*, also could become triggers for compliance with environmental assessment requirements under *CEAA* in certain circumstances, including in relation to abandoned mine land abatement, remediation, and reclamation activities.

d. Federal Environmental Liability Protection Under Bankruptcy and Insolvency Law

The *Bankruptcy and Insolvency Act* ("*BIA*")⁷⁴ permits trustees in bankruptcy to be appointed by courts to administer the estates of bankrupt persons. Property owned by the bankrupt becomes the responsibility of the trustee for the purposes of selling assets and distributing the sale proceeds to creditors. If the bankrupt's property is contaminated, a trustee confronts the same liability problems faced by other persons responsible for creating or exacerbating an environmental problem. Similarly, receivers are appointed by creditors pursuant to a court order to take possession and control of the property of bankrupt or insolvent persons. Receiver-managers have the further responsibility of carrying on the business of the debtor. Receivers and receiver-managers also can attract environmental liability where such properties are contaminated and made the subject of clean-up orders under environmental legislation.

Parliament has long recognized the need in society for trustees, receivers, and receiver-managers to take up the responsibilities of winding up insolvent estates. However, because of the likelihood that in the absence of appropriate statutory protection from potential environmental liability few would take up these responsibilities, Parliament enacted in the 1990s two sets of amendments to the *BIA*. In 1992, amendments to the Act exempted a trustee in bankruptcy from personal liability under environmental legislation if the harm occurred before the trustee's appointment, or after the appointment, unless the damage occurred as a result of the trustee's failure to exercise due diligence.⁷⁵ In 1997, further amendments to the *BIA* also exempted receivers and receiver-managers from environmental liability, as well as changed the standard of care during administration of the bankrupt's estate for trustees (and receivers and receiver-managers) from due diligence to gross negligence or willful misconduct.⁷⁶

⁷² *Ibid.*, s. 58.

⁷³ *Ibid.*, s. 37.

⁷⁴ R.S.C. 1985, c. B-3.

⁷⁵ S.C. 1992, c. 27, s. 9(1) (amending s. 14.06).

⁷⁶ S.C. 1997, c. 12, s. 15(1) (amending s. 14.06).

The categories of persons provided with environmental liability protection under the *BIA* are probably too narrow to include those who voluntarily propose to undertake abandoned mine land abatement, remediation, or reclamation activities. However, the principle contained in this type of legislation could be considered under broader federal environmental legislation and has been recommended for adoption under provincial laws discussed further below.

e. Summary

Based on the above review, federal natural resource and environmental laws in Canada contain the following characteristics that may constitute **regulatory and institutional barriers** to voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Licensing* requirements under natural resource management laws applicable to northern Canada that prohibit conditions in a licence from allowing deposits of wastes to certain waters that would violate regulations under these laws as well as under other federal laws such as the *Fisheries Act*;
- *Regulations* under certain federal environmental regulatory statutes such as the *Fisheries Act* that may apply in some circumstances to deposits of certain substances from metal mines, though there is some uncertainty about the nature and extent of their application to voluntary cleanups at abandoned mines given the wording of new regulations on metal mining effluents that go into effect in December 2002;
- Prospectively, regulations and/or *pollution prevention plans* under the *Canadian Environmental Protection Act, 1999* that could apply to releases of certain substances, such as arsenic, cadmium, and nickel, from voluntary cleanups at abandoned mine land areas;
- *Environmental assessment requirements* under the *Canadian Environmental Assessment Act* that could apply to such activities as a result of regulations under the Act that list provisions from other federal laws such as the *Fisheries Act* (e.g. authorization to alter fish habitat) that trigger a requirement to perform an environmental assessment. Prospectively, provisions from the new *Species at Risk Act* also could be listed under *CEAA Law List Regulations* and consequently also could trigger obligations to conduct an environmental assessment.

Based on the above review, federal natural resource and environmental laws in Canada contain the following characteristics that may constitute **liability disincentives** to voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Quasi-criminal liability resulting in prosecution for violating prohibitions* in respect of licensing provisions or regulations under various natural resource management laws applicable to northern Canada;
- *Quasi-criminal liability resulting in prosecution for violating prohibitions* in respect of various provisions of the *Fisheries Act*, such as carrying out a work or undertaking that results in harmful alteration of fish habitat or the deposit of deleterious substances into water frequented by fish, and the regulations, if applicable;
- *Joint and several civil liability* to the Crown in Right of Canada or a province, as well as to fishermen for deposits of deleterious substances in waters frequented by fish contrary to the *Fisheries Act* that require cleanup or cause loss of income;
- Prospectively, *orders, remedial and other measures, and prohibitions* including those applicable to officers, directors, and agents of corporations in respect of violations of regulations and/or pollution prevention plans under *CEPA, 1999*; and
- *Ministerial orders, court injunctions, or both* in respect of violations of environmental assessment requirements under *CEAA*.

Based on the above review, federal environmental laws in Canada contain precedents for the following **collaborative opportunities** in respect of voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Exempting from personal liability under environmental legislation* a trustee in bankruptcy, receiver, or interim-receiver if the harm occurred before their appointment, or after the appointment, unless the damage occurred as a result of their gross negligence or willful misconduct;
- The above categories of persons provided with environmental liability protection under the *BIA* are probably too narrow to include those who voluntarily propose to undertake abandoned mine land abatement, remediation, and reclamation activities. However, the principle contained in this type of legislation could be considered under broader federal environmental law reforms.

2. Provincial

There are four broad areas of provincial law that are applicable potentially to the issue of abandoned/orphaned mine lands and their abatement, remediation, and reclamation. First, there is the common law or judge-made law that exists in each of the nine common law provinces of Canada. Second, there is the civil law of Quebec. Third, there is pollution control or environmental legislation in each province designed to address emissions to air, discharges to water, or contamination of land from mining activities. Fourth, there are mining laws that are designed to facilitate mining exploration, development, and closure. Each of the above categories of law present both potential opportunities and obstacles to facilitation of abandoned mine land abatement, remediation, and reclamation.

a. Common Law Regime in Canada

In the common law provinces of Canada there are a variety of causes of action that are available to individuals harmed by the actions of others. These various causes of action include:

1. negligence⁷⁷ (including regulatory negligence);⁷⁸
2. trespass to land;⁷⁹
3. private nuisance;⁸⁰
4. riparian rights;⁸¹

⁷⁷ Negligence is conduct that breaches a standard of care owed to a person who is harmed by that conduct. The elements to be proved by the plaintiff include the following. First, the plaintiff is within a class of persons to whom the defendant owed a duty of care. Second, the defendant's conduct fell below the standard required of a reasonable person engaged in the particular activity. Third, foreseeable damage (i.e. damage that is not too remote and that is caused in fact by the conduct) resulted from the breach of duty.

⁷⁸ Negligence also is available against public authorities where harmful conduct is approved or where agency officials fail to take steps to prevent harm where they knew or ought to have known that harm would result. A public authority is not liable where conduct that results in harm is the result of a policy decision. However, liability in negligence may result if the conduct that results in harm arises from the operation of the policy, such as an inadequate or faulty system of inspection implemented pursuant to the policy.

⁷⁹ Trespass is the physical invasion of property by people or objects however minute the invasion, without the consent of the owner or occupant. Liability in trespass does not depend on proof of damages. To deposit a foreign substance such as water or waste on the property of another, and in so doing disturb that person's possession of property, however slight the disturbance, constitutes trespass, regardless of whether the substance is toxic or non-toxic.

⁸⁰ Private nuisance is the unreasonable interference with the owner's or occupier's use and enjoyment of land. Liability in private nuisance does not depend on physical invasion of land, as does trespass, or on interference with exclusive possession, but rather on interference with an owner's or occupier's interest in the beneficial use of land.

⁸¹ Riparian rights refers to the use and enjoyment of water in a stream, river, or lake arising from possession of land bordering on the water. An interest in the land gives a person the right to the continued flow of the water in its natural quantity and quality in an undiminished and unpolluted state. Actual damage need not be shown, just a deterioration in the quality of water flowing past the riparian owner's land.

5. strict liability;⁸²
6. public nuisance;⁸³
7. trespass to the person in the form of battery.⁸⁴

Where a defendant is found liable in one or more of these torts (civil wrongs), the judge has a variety of remedies available, including awarding monetary compensation (damages), an injunction, a declaration, or other remedy.

There are a number of defences available to these causes of action including:

1. standing to sue;⁸⁵
2. statutory authority;⁸⁶
3. prescription;⁸⁷
4. acquiescence;⁸⁸

⁸² Strict liability arises from the act of a person bringing onto his or her land something which is "not naturally" there, and which is likely to cause harm if it escapes. If it does escape, the person may be required to compensate another for injury or damages, although the loss was neither intentionally nor negligently inflicted.

⁸³ Public nuisance is an unreasonable interference with a right common to all members of the public. However, a private citizen may only bring an action in public nuisance upon suffering harm different from the harm suffered by the public (sometimes referred to as special damages). Where a plaintiff's injury is common to all and is no greater than that of other members of the public, only the attorney general of a province may sue in public nuisance to vindicate the right. Recent statutory reforms in Ontario now permit any person to bring an action who has suffered or may suffer a direct economic loss or direct personal injury because of a public nuisance causing environmental harm. The consent of the attorney general to bring the action is not necessary, nor is it relevant whether other persons have been similarly injured. *Environmental Bill of Rights, 1993*, S.O. 1993, c. 28, s. 103.

⁸⁴ Battery is based on the deliberate application of force by one person to another that results in harmful or offensive contact. Such intention is difficult to prove in environmental cases. However, intention includes the doctrine of substantial certainty, which means that the courts will regard an act as intentional in law if the defendant can be said to (1) desire consequences that flow from the act; or (2) be substantially certain such consequences would occur.

⁸⁵ Lack of standing to sue arises primarily in the context of a public nuisance action. Unless the plaintiff can demonstrate special damage beyond that suffered by the public, only the attorney general may sue in public nuisance to vindicate the right.

⁸⁶ If a public authority has acted in conformity with its legislative mandate in approving or regulating an activity with potential environmental consequences, or if a member of the regulated community has complied with the terms and conditions of any permits issued to it, then these entities may not be liable for harm caused to persons or property. The courts have traditionally "read down," or narrowly interpreted, statutory provisions authorizing particular activities so as to minimize interference with the personal and property rights of individuals harmed by such activities.

⁸⁷ Prescription refers to the right to pollute a neighbour's lands that is acquired by one who has caused a private nuisance continuously for 20 years with the neighbour's knowledge and acquiescence. Where a court finds that a prescriptive right has been acquired, the court will not uphold the plaintiff's claim. However, prescription is not a defence to an action in public nuisance.

⁸⁸ Acquiescence refers to conduct by a plaintiff in expressly consenting or actively encouraging the offending activity of the defendant. Where the court finds acquiescent conduct by a plaintiff, the action will be barred. However, merely standing by will not constitute acquiescence by a plaintiff.

5. act of God;⁸⁹
6. deliberate act of a third person;⁹⁰
7. default of the plaintiff (person alleging harm).⁹¹

Also some mining legislation of certain common-law provinces may provide mining companies with certain rights or easements on neighbouring lands to conduct mining activities. These provisions may limit the remedies available to persons alleging harm (e.g. availability of only monetary damages).⁹² It is not clear whether an abandoned mine abatement, remediation, or reclamation project would be afforded such protection.

The above causes of action in the absence of a defence, such as statutory authority for undertaking an abandoned mine abatement, remediation, and reclamation project, would provide persons alleging harm with a wide variety of claims to raise in a civil lawsuit against the source of such harm.

b. Civil Law Regime in Canada

The Civil Code of Quebec contains concepts of "abuse of rights" that are analogous to those found in the common law.⁹³ These rights, in the absence of statutory authority for undertaking an abandoned mine abatement, remediation, or reclamation project, would provide persons alleging harm from such activity with a wide variety of claims against the source of any harm.⁹⁴

c. Provincial Environmental Laws

The environmental legislation of each province contains many of the same regulatory elements. In general, these elements include:

1. general prohibitions on pollution;⁹⁵

⁸⁹ An "act of God" refers to an unforeseeable and unavoidable natural phenomenon such as a flood, tornado, or earthquake.

⁹⁰ An act of a third person refers to an act of sabotage or related action by a person outside the control of the defendant.

⁹¹ A plaintiff's consent to, or default in connection with, the conduct of the defendant (e.g. such as contributory negligence by the plaintiff) may be available as a defence to an action brought by the plaintiff.

⁹² *Mining Act*, R.S.O. 1990, c. M.14, s. 175.

⁹³ See e.g. *Civil Code of Quebec*, S.Q. 1991, c. 64, art. 1457 (every person has a duty to abide by the rules of conduct which lie upon him so as not to cause injury and where such person, endowed with reason, fails in this duty, he is responsible for any injury caused). The *Civil Code of Quebec* also recognizes concepts of riparian rights and obligations. *Ibid.*, arts. 979, 981, 982.

⁹⁴ See generally L. Giroux, "Environmental Law in Quebec," in E.L. Hughes, A.R. Lucas, & W.A. Tilleman, eds., *Environmental Law and Policy*, 2d ed. (Toronto: Emond Montgomery, 1998) 123-135.

⁹⁵ See e.g. *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, s. 32 (a person that discharges, causes, or permits a discharge of any material of any kind into or in any waters or on any shore or bank thereof or in any place that may impair the quality of the water is guilty of an offence).

2. application procedure and permit, approval, or licensing authority for discharges (that constitute an exception to the general pollution prohibitions);⁹⁶
3. authority for a variety of environmental remediation and clean-up orders;⁹⁷
4. exemption or variance authority from approvals and orders;⁹⁸
5. an appeal regime in respect of approvals and orders;⁹⁹
6. a complex regime of quasi-criminal and administrative offences and penalties (including provisions creating environmental liability for officers and directors of corporations);¹⁰⁰
7. special regimes of obligation and liability in relation to spills of pollutants into the environment;¹⁰¹
8. complex regimes of management requirements and liability in relation to hazardous wastes and, in some provinces, contaminated lands;¹⁰² and
9. regulation-making authority.¹⁰³

In the absence of statutory provisions to the contrary, many of these standard elements of most provincial environmental legislation could be expected to apply to abandoned mine land abatement, remediation, and reclamation activities.

A number of aspects of provincial environmental law, policy, or practice merit special attention because of their (1) potential significance to, or direct impact on, abandoned mine land abatement, remediation, and reclamation activities, or (2) potential precedential value in how to address such activities. The following summarizes the environmental legislation of nine provinces (excluding Prince Edward Island) that may be applicable to such activities.

i. Western Provinces

BRITISH COLUMBIA

⁹⁶ See *e.g. Alberta Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12, ss. 66 (procedure on applications for approval), 68 (issuance of approval by director).

⁹⁷ See *e.g. Environmental Protection Act*, R.S.O. 1990, c. E.19, ss. 7 (control orders), 8 (stop orders), 17 (remedial orders), 43 (waste removal orders), 97 (restoration orders).

⁹⁸ See *e.g. Alberta Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12, s. 77 (any person engaged in an activity governed by the regulations may apply to the Minister for a certificate of variance to vary a term or condition of an approval or requirement of the regulations).

⁹⁹ See *e.g. Environmental Protection Act*, R.S.O. 1990, E.19, ss. 139-140 (refusals to issue approvals, licences, permits, the imposition of terms and conditions on such instruments, or the issuance of orders entitles person to appeal such decisions to an administrative appeal tribunal established under the Act).

¹⁰⁰ *Ibid.*, ss. 186-193 (general offence and penalty provisions for violation of the Act), 194 (duties, offences, and liability of directors and officers of corporations).

¹⁰¹ *Ibid.*, Part X (duties and liabilities of owners and persons having control of pollutants that are spilled into the environment).

¹⁰² See *e.g. Waste Management Act*, R.S.B.C. 1996 (Supp.), c. 482, Part 4 (contaminated site remediation).

¹⁰³ See *e.g. Environmental Protection Act*, S.N.L. 2002, c. E-14.2, s. 111 (regulation-making authority).

British Columbia's *Waste Management Act* ("WMA")¹⁰⁴ contains the typical elements of provincial environmental legislation noted above that also can apply generally to mining activity including authority to (1) require discharge permits,¹⁰⁵ (2) address spills,¹⁰⁶ and (3) impose pollution abatement and prevention orders.¹⁰⁷

However, there are six aspects of British Columbia environmental law, policy, or practice that merit comment in the context of abandoned mine land abatement, remediation, and reclamation. These include:

1. Absolute, retroactive, joint and several liability of responsible persons under the province's WMA contaminated sites regime;¹⁰⁸
2. Exemption from the above liability for historic mine site contamination;
3. Secured creditor exemptions;
4. Authority defining and for determining criteria for orphan sites;
5. Maintenance of contaminated site registry; and
6. Periodic publication of non-compliance reports.

Absolute, retroactive, joint and several liability of responsible persons

British Columbia's existing contaminated sites regime under the WMA, normally imposes liability that is "absolute, retroactive, joint, and several,"¹⁰⁹ on the following categories of "responsible persons:"

1. a current owner or operator of the site;
2. a previous owner or operator of the site;
3. a person who
 - produced a substance, and

¹⁰⁴ WMA, R.S.B.C. 1996, c. 482.

¹⁰⁵ *Ibid.*, ss. 3 (discharge of a waste into the environment resulting from the development or operation of a mine requires a permit issued by the Ministry of Water, Land, and Air Protection), 54 (failure to obtain a required permit, or to comply with the terms of a permit, constitutes an offence under the Act).

¹⁰⁶ *Ibid.* ss. 12 (ministry may order a person who has possession, charge, or control of a polluting substance to carry out investigations, prepare a contingency plan, and conduct work to lessen the risk of an escape or spill), 12.1 (ministry may take steps to cleanup a spill and require the person who had possession, charge, or control of the substance to pay the costs of the spill rescue response action).

¹⁰⁷ *Ibid.* ss. 31 (pollution abatement orders), 33 (pollution prevention orders). Persons to whom pollution abatement orders may be issued include those who: (1) had possession, charge, or control of the substance before it escaped or spilled, (2) own or occupy the land on which the substance is or was located before the event occurred, and (3) caused or authorized the pollution. *Ibid.*, s. 31. Persons to whom pollution prevention orders may be issued include those who: (1) previously had or now have possession, charge, or control of the substance, (2) previously did anything, or who are now doing anything, which may cause the release of the substance, and (3) previously owned or occupied, or now own or occupy, the land on which the substance is located. *Ibid.*, s. 33.

¹⁰⁸ WMA, R.S.B.C. 1996 (Supp.), c. 482, Part 4 (contaminated site remediation).

¹⁰⁹ *Ibid.*, s. 27(1).

- by contract, agreement or otherwise cause the substance to be disposed of, handled or treated in a manner that, in whole or in part, caused the site to become a contaminated site;
- 4. a person who
 - transported or arranged for transfer of a substance, and
 - by contract, agreement or otherwise caused the substance to be disposed of, handled or treated in a manner that, in whole or in part, caused the site to become a contaminated site;
- 5. a person who is in a class designated in the regulations as responsible for remediation.¹¹⁰

However, the *WMA*, apart from the new historic mine site provisions noted below, also provides companies with other opportunities to determine, manage, and limit their liability through such measures as:

1. entering into voluntary remediation agreements;¹¹¹
2. seeking an opinion from an allocation panel regarding appropriate share of liability;¹¹²
3. undertaking onsite risk management activities, and obtaining conditional certificates of compliance, that provide assurance to lenders and constitute a statutory defence in private cost recovery lawsuits;¹¹³ and
4. obtaining a minor contributor status ruling if the company has contributed only a small portion of a site's contamination.¹¹⁴

In addition, contaminated site remediation regulations under the *WMA* clarify the statute's liability principles by making it clear that nothing in the Act shall be construed as prohibiting the apportionment of a share of liability to one or more responsible persons by the government or a court. However, apportionment only may be made if it is justified by available evidence.¹¹⁵

The nature and extent of the liability regime established under the *WMA* has been both defended¹¹⁶ and criticized¹¹⁷ generally and in the mining context in particular.

¹¹⁰ *Ibid.*, s. 26.5(1).

¹¹¹ *Ibid.*, s. 27.4.

¹¹² *Ibid.*, s. 27.2.

¹¹³ *Ibid.*, s. 27.6.

¹¹⁴ *Ibid.*, s. 27.3. Minor contributors are not jointly and severally liable for all remediation costs, but only are responsible for the portion of the remediation costs that the government determines is attributable to the minor contributor. *Ibid.*, s. 27.3(3).

¹¹⁵ *Contaminated Site Regulations*, B.C. Reg. 375/96, s. 34(1)(2).

¹¹⁶ W. Brault, "Liability Features of Bill 26" (1994) 4 J. Env. L. & Pract. 139, 158-173 (noting that the *WMA* liability principles of absolute, retroactive, joint and several liability are generally found in Canadian environmental legislation).

¹¹⁷ R. Crowley & F. Thompson, "Retroactive Liability, Superfund and the Regulation of Contaminated Sites in British Columbia" (1995) 29 U.B.C.L.Rev. 87, 106-116 (approving of *WMA* allocation panel process and minor contributor provisions but arguing for more reasonable, fair, and efficient apportionment of responsibility between province, local beneficiaries, and past polluters).

Exemption from Liability for Historic Mine Site Contamination

Amendments to British Columbia's *WMA*, passed in May 2002, establish a new regime in regard to "historic mine site" contamination that will work in conjunction with the province's existing contaminated sites regime.¹¹⁸ The amendments define an "historic mine site" as an area:

1. where mechanical disturbance of the ground or any excavation has been made to produce coal or mineral bearing substances, including a site used for processing, concentrating, or waste disposal; and
2. for which a *Mines Act* permit does not exist and no identifiable owner or operator is taking responsibility for contamination at the site.¹¹⁹

The amendments create two exemptions from remediation liability at historic mine sites. A person is not responsible for remediation at a historic mine site if:

1. indemnification has been provided to the person for that site under the *Financial Administration Act*; or
2. the person has acquired the mineral or coal rights at the site for the purpose of undertaking mineral or coal exploration activities and the exploration activities have not exacerbated any contamination that existed at the time the person acquired these mineral or coal rights.¹²⁰

These amendments arose out of recommendations made to the provincial government in 2001 that included development of "good samaritan" type legislative reforms.¹²¹ However, the reforms actually implemented by the province appear to focus on facilitating "remining" activity and not necessarily voluntary remediation of historic mine sites.

¹¹⁸ Bill 32, *Waste Management Amendment Act, 2002*, 3rd Sess., 37th Parl., B.C., 2002 (assented to 10 May 2002). The amendments create a new Part 4.1 (remediation of mineral exploration sites and mines).

¹¹⁹ *Ibid.*, s. 28.8.

¹²⁰ *Ibid.*, s. 28.93.

¹²¹ B.C. Ministry of Energy and Mines & Ministry of Environment, Lands, and Parks, *External Review of Mine Reclamation and Environmental Protection Under the Mines Act and Waste Management Act* by P. Houlihan & J. Titerle (Victoria, B.C.: MEM & MELP, 2001) at 77 (noting that mining company representatives advised the authors that, in certain situations, mining companies would be willing to carry out remediation work voluntarily at historic mines sites in the vicinity of their operations if such work did not lead to liability for the companies. However, companies are reluctant to carry out volunteer work because they will thereby become a "responsible person" in respect of the site), 78, 90 (recommending exempting a mining company from being a "responsible person" under the contaminated sites provisions in respect of a contaminated site as a result of carrying out "good samaritan" remediation if (1) prior to commencing the remediation, the mining company was not a "responsible person" in respect of the site; and (2) MEM and MELP approve of the work. The exemption would not apply, however, to the extent the contamination is caused or exacerbated by work carried out negligently by the mining company).

In all other circumstances under the amendments, Ministry of Water, Land, and Air officials may still issue remediation, pollution prevention, and pollution abatement orders for historic mine sites under the *WMA*.

Secured Creditor Exemptions

Secured creditors are responsible persons under British Columbia's *WMA* and, in the normal course, if they assume ownership or exercise control over the operation of a contaminated site would face potential liability for the site's remediation.¹²² However, the *WMA* also provides an exemption from liability for secured creditors who act primarily to protect their security interest if they:

1. participate only in purely financial matters related to the site;
2. have the capacity or ability to influence the operation of the site in a way that would have the effect of causing or increasing contamination, but do not exercise that capacity or ability;
3. impose requirements on any person but the requirements do not have a reasonable probability of causing or increasing contamination at the site; or
4. appoint a person to inspect and investigate a contaminated site to determine future steps or actions that the secured creditor might take.¹²³

The effect of this exemption is to encourage potential clean-ups of contaminated properties by persons who did not cause the original contamination. A provision of this type could be viewed as a precedent for extension to voluntary abandoned mine abatement, remediation, and reclamation activities.

Authority defining and for determining criteria for orphan sites

The *WMA* defines an "orphan site" as:

1. a contaminated site for which a responsible person cannot be found or is not willing or financially able to carry out remediation in a time frame specified by a provincial official (the "manager"); or
2. a contaminated site of which a government body has become the owner subsequent to the failure of the former owner to comply with a requirement to carry out remediation at the site.¹²⁴

The Act authorizes the manager to determine in accordance with the regulations that a contaminated site is an orphan site, and that such a site constitutes a "high risk." Where such a determination is made the Minister may declare, in writing, that it is necessary for the protection of human health or the environment for the government to

¹²² *WMA*, R.S.B.C. 1996 (Supp.), c. 482, Part 4 (contaminated site remediation), s. 26.5(3)(a)(b).

¹²³ *Ibid.*, s. 26.5(c)-(f).

¹²⁴ *Ibid.*, s. 26(1).

undertake remediation at a "high risk orphan site." In such circumstances, the Minister may carry out the remediation and recover reasonable costs of so doing, or require by order that the work be done or paid for by the person identified in the order.¹²⁵

The high risk orphan site provision may be of assistance in prioritizing abandoned mine lands that should be the focus of voluntary abatement, remediation, and reclamation activity.

Contaminated Site Registry

The WMA contaminated site regime also requires the Minister to establish a registry of contaminated sites. The Act authorizes the compilation in the registry of information on each site's status, any orders, approvals, voluntary remediation agreements, or other pertinent information applicable to the site.¹²⁶

Non-Compliance Reports

In a number of provinces, non-compliance registries are becoming an increasingly typical approach to compliance assurance. Since 1990 in British Columbia, for example, the province has produced a non-compliance report every six months that lists operations whose compliance with environmental regulations, permits, approvals, orders, etc. during the reporting period is of concern to the government. Depending on the severity of the non-compliance identified, particularly in the case of chronic or repeat offenders, operations may be subject to enforcement action.

In the context of abandoned mine lands, the existence of a comprehensive list or registry of such sites and their status on a province-by-province basis could be of assistance to those considering prioritizing collaborative voluntary abatement, remediation, and reclamation activities.

ALBERTA

Alberta's *Environmental Protection and Enhancement Act* ("AEPEA")¹²⁷ contains the typical elements of provincial environmental legislation noted above that also apply generally to mining activity. These include (1) requiring approvals,¹²⁸ (2) addressing releases to the environment including spills,¹²⁹ and (3) imposing environmental protection orders for contaminated sites and the conservation and reclamation of lands.¹³⁰

¹²⁵ *Ibid.*, s. 28.4.

¹²⁶ *Ibid.*, s. 26.3.

¹²⁷ AEPEA, R.S.A. 2000, c. E-12.

¹²⁸ *Ibid.*, s. 68.

¹²⁹ *Ibid.*, Part 5, Division 1, ss. 107-122 (release of substances).

¹³⁰ *Ibid.* ss. 113 (environmental protection order for release), 129 (environmental protection order regarding contaminated sites), 140-142 (environmental protection order regarding conservation and reclamation).

However, there are several aspects of Alberta environmental law, policy, or practice that merit comment in the context of abandoned mine land abatement, remediation, and reclamation. These include:

1. relationship between reclamation certificates and contaminated site designation;
2. joint and several liability under administrative orders;
3. variance authority; and
4. authority for limiting liability of certain responsible persons from administrative orders.

Relationship Between Reclamation Certificates and Contaminated Site Designation

The *AEPEA* requires that current and past operators reclaim land and obtain a reclamation certificate.¹³¹ Upon obtaining a reclamation certificate, an operator cannot be subject to environmental protection orders.¹³² However, the Act also allows a director under the Act to designate a site as contaminated where a substance may cause, or has caused, a significant adverse environmental effect.¹³³ This designation may be made even if a reclamation certificate has been issued for the site.¹³⁴ Once a site has been so designated, the director may issue an environmental protection order requiring any "person responsible" to cleanup the site.¹³⁵ Persons responsible include past and present owners of the substance or thing, or persons who have or had charge or control of the substance or thing.¹³⁶

Accordingly, these provisions make it evident that a volunteer considering abating, remediating, or reclaiming abandoned mine lands could be subject to both the reclamation and contaminated site remediation provisions of the Act.

Joint and Several Liability under Administrative Orders

Under the *AEPEA* there is authority for establishing both joint and several liability for compliance with environmental protection and other types of orders issued under the Act. Where, for example, an environmental protection order is directed to more than one person, all persons named in the order are jointly responsible for carrying out the terms of the order. In addition, they are jointly and severally liable for payment of the costs of doing so, including the costs of the province in enforcing the order.¹³⁷

¹³¹ *Ibid.*, ss. 134, 137.

¹³² *Ibid.*, s. 140.

¹³³ *Ibid.*, s. 125.

¹³⁴ *Ibid.*, s. 125(2).

¹³⁵ *Ibid.*, s. 129.

¹³⁶ *Ibid.*, s. 1.

¹³⁷ *Ibid.*, ss. 215, 240.

This type of liability scheme is not atypical in environmental law. Voluntary abandoned mine land abatement, remediation, or reclamation activity, in the absence of statutory protection to the contrary, would usually be subject to liability of this type.

Variance Authority

Under the *AEPEA*, an approval or registration holder and any other person who is engaged in any activity that is governed by regulations under the Act may apply to the Minister for a certificate of variance. The applicant may seek to vary a term or condition of an approval or a requirement of the regulations. Any application for a variance certificate must include information showing the nature and extent of all consultations that the applicant has had with persons who will be directly affected by the proposed variance.

The Minister may issue a certificate of variance if of the opinion that:

1. the activity to which the certificate relates is operating or is likely to operate in contravention of a term or condition of an approval or a requirement of the regulations as a result of factors beyond the control of the applicant;
2. the proposed variance is not likely to cause significant adverse effect; and
3. refusal to grant a certificate of variance would result in serious economic hardship to the applicant without an offsetting benefit to others.¹³⁸

The approach of using variances as an "escape valve" from generally applicable environmental requirements would appear to be broad enough, and to contain no limitations at least under Alberta law, that would prevent its being applied in the context of abandoned mine land abatement, remediation, or reclamation activities. Because the variance is issued as an instrument under provincial statute law, it would provide a potential statutory authority defence to any civil litigation as long as it was complied with. To the extent a general variance provision, such as that contained in Alberta law, is inadequate as a measure for protecting such activities from attracting liability, the existence of such authority provides a precedent, with appropriate modification, for adopting a more specific approach tailored to the abandoned mine land context.

Authority for Limiting Liability of Certain Responsible Persons from Administrative Orders

Under the *AEPEA*, trustees, receivers, and receiver-managers are defined as "persons responsible" who can be issued environmental protection orders in connection with contaminated sites.¹³⁹ However, other provisions of the Act limit their liability to the value of the assets they are administering. However, this limitation in their liability does

¹³⁸ *Ibid.*, s. 77 (certificate of variance).

¹³⁹ *Ibid.*, s. 1.

not apply if they aggravated the situation identified in the order by their "gross negligence or willful misconduct."¹⁴⁰

Like the *BIA* discussed under federal law above, the categories of persons provided with environmental liability protection under the *AEPEA* are probably too narrow to include those who voluntarily propose to undertake abandoned mine land abatement, remediation, or reclamation activities. However, the principle contained in this legislation could be considered under more broadly drafted provincial environmental legislative exemptions.

SASKATCHEWAN

Saskatchewan's *Environmental Management and Protection Act* ("*SEMPA*")¹⁴¹ contains typical elements of provincial environmental legislation noted above that also apply generally to mining activity. These include: (1) requiring permits for industrial effluent discharges,¹⁴² (2) addressing control of spills,¹⁴³ and (3) imposing environmental restoration and protection orders.¹⁴⁴

There are several aspects of Saskatchewan environmental law, policy, or practice that merit comment in the context of abandoned mine land abatement, remediation, and reclamation. These include:

1. waiver of permit requirements;
2. mining industry pollution control facility and mine reclamation approvals imposed by regulations.

Waiver of Permit Requirements

SEMPA authorizes the Minister of Environment and Resource Management to waive the requirements to obtain a permit, where he or she considers it appropriate.¹⁴⁵ Accordingly, subject to the discussion below respecting the applicability of mineral industry environmental protection regulations, this waiver could apply to the obligation to obtain a permit even where:

1. a contaminant will be discharged to water and may change water quality or cause water pollution; or
2. industrial effluent works are to be constructed, installed, altered, extended, or operated.¹⁴⁶

¹⁴⁰ *Ibid.*, s. 240(3).

¹⁴¹ *SEMPA*, S.S., 1983-84, c. E-10.2. Recently, Bill 71 - *Environmental Management and Protection Act*, 2002 received first reading in the Saskatchewan legislature. When enacted it will repeal the existing statute.

¹⁴² *Ibid.*, ss. 17, 18.1.

¹⁴³ The Environmental Spill Control Regulations, Sask. Reg. 53/83.

¹⁴⁴ *SEMPA*, s. 4.

¹⁴⁵ *Ibid.*, s. 19.

¹⁴⁶ *Ibid.*, s. 17(a)(c).

Mining Industry Pollution Control Facility and Mine Reclamation Approvals Imposed by Regulations

Notwithstanding the above waiver provisions, mineral industry environmental protection regulations have been promulgated under *SEMPA* that require the obtaining of approvals to:

1. construct, install, alter, extend, operate, or temporarily close a pollution control facility; or
2. decommission and reclaim a mining site.¹⁴⁷

Accordingly, it would appear that a volunteer proposing to abate, remediate, and reclaim an abandoned mine would have to comply with these regulations.

MANITOBA

Manitoba's *Environment Act* ("MEA") contains typical elements of provincial environmental legislation noted above that also apply generally to mining activity. These include requiring licences for discharges into the environment from various classes of industrial development.¹⁴⁸ Under the Act all operating metal mines in the province are subject to environmental licences that set environmental standards.¹⁴⁹

The province also recently enacted the *Contaminated Sites Remediation Act* ("CSRA"). Like the law of British Columbia, the CSRA contains measures relating to:

- investigation and identification of contaminated sites;
- identification of persons responsible for remediation;
- development of remediation plans and implementation of remediation orders;
- principles of apportionment of remediation responsibility (by agreement or order);
- limitations on responsibility and corresponding liability;
- cost recovery, and related matters.¹⁵⁰

The Act could be applied to mine sites by regulation.

¹⁴⁷ The Mineral Industry Environmental Protection Regulations, 1996, Sask. Reg. c. E-10.2, Reg. 7, s. 3.

¹⁴⁸ *The Environment Act*, S.M. 1987-88, c. E125, ss. 10-15.

¹⁴⁹ Government of Manitoba, *State of the Environment Report for Manitoba* (Winnipeg: Government of Manitoba, 1995) at 1.

¹⁵⁰ *The Contaminated Sites Remediation Act*, C.C.S.M., c. C205.

ii. Central Canada

ONTARIO

Ontario's primary pollution control statutes, the *Environmental Protection Act* ("EPA") and the *Ontario Water Resources Act* ("OWRA") contain many of the typical elements of provincial environmental legislation noted above that also apply to mining activity. These include (1) approvals for discharges to water;¹⁵¹ (2) spill response measures;¹⁵² and (3) issuance of orders.¹⁵³

There are several aspects of Ontario environmental law, policy, or practice that merit comment in the context of abandoned mine land abatement, remediation, and reclamation. These include:

1. Administrative liability of responsible persons arising from owning, occupying or having charge, management, or control of a source of contaminant;
2. Civil liability under environmental bill of rights and spills laws.

Administrative Liability of Responsible Persons arising from Owning, Occupying or having Charge, Management, or Control of a Source of Contaminant

Under Ontario's *EPA* a person may be responsible for complying with environmental clean-up orders if the person is the owner, or the person in occupation or having the charge, management or control of a source of contaminant.¹⁵⁴ In one case interpreting this authority, the Ontario Court of Appeal upheld the issuance of a clean-up order to an owner and person in control and management of a plant that was a continuing source of contamination, even though the court made the following findings:

1. the company had only recently acquired the plant;
2. the company had not been the owner during the period when contamination from the plant was at its worse;
3. the company had taken many active steps to reduce or contain the contamination since acquiring the plant; and
4. the plant was operating in a more environmentally satisfactory manner since the acquisition.¹⁵⁵

¹⁵¹ *OWRA*, R.S.O. 1990, c. O.40, s. 53.

¹⁵² *EPA*, R.S.O. 1990, c. E.19, Part X (spills).

¹⁵³ *Ibid.*, ss. 7 (control orders), 8 (stop orders), 17 (remedial orders), 18 (preventive orders), 43 (waste removal orders), 44 (director's orders), 97 (restoration orders).

¹⁵⁴ *Ibid.*, ss. 7 and 18. This authority now also applies to past owners, occupiers, and those persons who had charge, management, or control of a source of contaminant.

¹⁵⁵ *Canadian National Railway Co. v. Ontario* (1992), 8 C.E.L.R. (N.S.) 1 (Ont. C.A.).

This case suggests that in Ontario abandoned mine land abatement, remediation, or reclamation activity could be caught under similar liability principles.

A potential gloss on this view arises from 1997 amendments to the Ontario *Mining Act*. These amendments provide that when rehabilitation conditions set by the Minister of Mines and Northern Development are met with respect to mining lands, and the lands are surrendered to the Crown, the mining company surrendering the lands is exempt from administrative liability under certain provisions of the *EPA*. The provisions relate to the obligation to comply with certain environmental orders.¹⁵⁶ The *Mining Act* provisions only protect the mining company surrendering the lands from environmental liability. Accordingly, so long as that same company is not involved in subsequent voluntary cleanup of the same lands, the exemptions from liability from environmental orders would not apply.

Recent "Brownfield" law amendments to the *EPA*, not yet in force until regulations are promulgated, would provide liability protection from future environmental orders for "owners" if they:

1. follow prescribed site assessment and clean-up standards and procedures;
2. file a "record of site condition" under a new registry established under the Act; and
3. use a certified consultant.¹⁵⁷

While of some precedential value, these amendments probably are not broad enough to protect a non-owner from becoming liable as a "responsible person" when volunteering to remediate abandoned mine land.

Civil Liability under Environmental Bill of Rights and Spills Laws

Under Ontario's *Environmental Bill of Rights, 1993* ("*EBR*"),¹⁵⁸ two civil litigation reforms became law in 1994 that increase access to the courts. First, any Ontario resident may now bring an action in the Superior Court of Ontario against a person who has "contravened or will imminently contravene" an Act, regulation, or instrument (e.g. approval, permit, licence) prescribed pursuant to the *EBR*. In order to bring such action, the actual or imminent contravention also must have caused or must imminently cause significant harm to a public resource in Ontario. A plaintiff cannot bring an action for actual contravention unless the appropriate minister fails to respond to the plaintiff's application for investigation,¹⁵⁹ which in the normal course will precede the bringing of such action. Remedies available to plaintiffs under the *EBR* include

¹⁵⁶ *Mining Act*, R.S.O. 1990, c. M.14, s. 149.1(1)(4). The provisions of the *EPA* from which the mining company would be protected are sections 7(1), 8(1), 17, 18, 43, and 44.

¹⁵⁷ S.O. 2001, c. 17.

¹⁵⁸ S.O. 1993, c. 28.

¹⁵⁹ *Ibid.*, s. 84.

injunctions, negotiation of a restoration plan, declaratory relief, or other measures, though not damages (monetary compensation).¹⁶⁰

Defences to the *EBR* cause of action include:

1. the defendant exercised due diligence in complying with an Act, regulation or instrument;
2. the alleged contravention is in fact authorized by an Act, regulation, or instrument; or
3. the defendant complied with an interpretation of the instrument a court considers reasonable.¹⁶¹

The second reform introduced by the *EBR* permits any person to bring an action who has suffered, or who may suffer, a direct economic loss or direct personal injury as a result of a public nuisance caused by environmental harm. Such action may be undertaken without the consent of the Attorney General and regardless of whether other persons have been similarly injured.¹⁶²

Neither of these reforms has been widely invoked in the eight years they have been the law of Ontario.¹⁶³ Accordingly, their ability to act as a liability impediment to voluntary abandoned mine land abatement, remediation, or reclamation activity is likely more theoretical than actual.

The same may be said for amendments to the *EPA* that became law in the 1980s regarding spills (defined to include deposits, leaks, emissions, and discharges) of pollutants. The *EPA* recognizes a person's right to compensation enforceable in the courts for loss, damage, cost, and expense as a direct result of the spill of a pollutant that causes or is likely to cause an adverse effect. The owner of the pollutant and the person having

¹⁶⁰ *Ibid.*, s. 93(1).

¹⁶¹ *Ibid.*, s. 85.

¹⁶² *Ibid.*, s. 103.

¹⁶³ Several reasons have been advanced as to why particularly the new cause of action under s. 84 of the *EBR* rarely has been invoked. First, there must be a violation of both prescribed law *and* significant harm to a public resource. This combination is more stringent than citizen suit requirements under legislation in the United States, and more stringent than those required by most nuisance laws. Second, the definition of "public resource" considerably narrows the ambit of s. 84 because it includes only public land. Third, the plaintiff bears the burden of proving the contravention or imminent contravention on a balance of probabilities. There are no burden shifting provisions as found, for example, under Michigan environmental rights law. Fourth, the *EBR* recognizes as a defence compliance with an interpretation of an instrument that the court considers reasonable. This appears to allow mistake of law or reasonable but erroneous interpretation of the law to be a defence, even though the courts historically have not accepted such a defence. Fifth, damages are an excluded remedy, thus providing less incentive for the provision to be invoked by a member of the public. Sixth, the *EBR* permits a court to dispense with a plaintiff's undertaking to pay damages to obtain an interlocutory injunction only where the court finds special circumstances, such as with test cases or novel points of law. Seventh, *EBR* litigation may impose high costs on plaintiffs for legal and technical expertise in attempting to demonstrate that harm to a public resource is significant. Furthermore, where plaintiffs are unsuccessful, they face the possibility of adverse cost awards. See Joseph F. Castrilli, "Environmental Rights Statutes in the United States and Canada: Comparing the Michigan and Ontario Experiences" (1998) 9 Vill. Env. L.J. 349 at 430-431.

control of the pollutant may be sued and made jointly and severally liable to the person entitled to compensation.¹⁶⁴

QUEBEC

Quebec's *Environment Quality Act* ("*EQA*")¹⁶⁵ contains typical elements of provincial environmental legislation noted above that also apply generally to mining activity. These include (1) requiring certificates of authorization for open pit mining activities in conjunction with a land reclamation plan;¹⁶⁶ and (2) issuance of remediation orders.¹⁶⁷

There are several aspects of Quebec environmental law, policy, or practice that merit comment in the context of abandoned mine land abatement, remediation, and reclamation. These include:

1. civil liability under environmental rights law; and
2. administrative liability of responsible persons under land protection and rehabilitation law.

Civil Liability under Environmental Rights Law

The *EQA* recognizes a right of every person to a healthy environment and to its protection, to the extent provided by the Act, regulations, orders, approvals, and authorizations issued under any section of the Act.¹⁶⁸ Upon application of any person domiciled in Quebec the Quebec Superior Court may grant an injunction to prohibit any act or operation that interferes or might interfere with such rights.¹⁶⁹ The entitlement to an injunction does not apply where the activity is being carried out in conformity with approvals, authorizations, or regulations issued under the Act.¹⁷⁰ Accordingly, the environmental rights recognized by the *EQA* have the potential to apply to voluntary abandoned mine land abatement, remediation, and reclamation activities in the province.

Administrative Liability of Responsible Persons under Land Protection and Rehabilitation Law

Very recent amendments to the *EQA* establish new rules to promote the protection of lands and their rehabilitation in the event of contamination.¹⁷¹ Under the amendments,

¹⁶⁴ R.S.O. 1990, c. E.19, s. 99.

¹⁶⁵ *EQA*, R.S.Q., c. Q-2.

¹⁶⁶ *Ibid.*, ss. 22-23. See also *Regulation Respecting the Application of the Environment Quality Act*, Order - in-Council 1529-93, (1993) 125 Que. Off. Gaz. II, 5996, s. 7(9).

¹⁶⁷ See P.R. Granda & O. Nadon, "The Mining Industry and the Restoration of the Environment in Quebec," (1995) 18 C.E.L.R. (N.S.) 197 at 207-209.

¹⁶⁸ *EQA*, R.S.Q. 1977, c. Q-2, s. 19.1.

¹⁶⁹ *Ibid.*, ss. 19.2-19.3.

¹⁷⁰ *Ibid.*, s. 19.7. See also L. Giroux, "Environmental Law in Quebec" in E. Hughes, et. al., eds. *Environmental Law and Policy*, 2d ed. (Toronto: Emond Montgomery, 1998) 123 at 137-139.

¹⁷¹ S.Q. 2002, c. 11 (assented to 11 June 2002).

the Minister of the Environment and Wildlife may order any person that has or had the custody of the land as owner or lessee or in any other capacity to submit a rehabilitation plan setting out measures that will be implemented to protect the environment. Such an order cannot be made against a person in certain circumstances. These circumstances include if the person was unaware of the contamination, acted diligently to solve the problem once becoming aware of it, or the presence of contaminants on the land resulted from outside migration from a source attributable to a third person.¹⁷²

The amendments also apply to "voluntary land rehabilitation." Where a person intends to rehabilitate contaminated land on a voluntary basis and to leave contaminants in the land in a concentration exceeding regulatory limit values, the person must first submit a rehabilitation plan to the Minister. The plan must set out proposed measures to protect humans, other living species, the environment, and property. The plan also must contain an implementation schedule, a toxicological and ecotoxicological risk assessment, and a groundwater impact assessment. In addition, a study must be submitted to the Minister characterizing the state of contamination of the land.¹⁷³

Notwithstanding the generality of these provisions and the exceptions, the obligations established under the amendments would appear to have the potential to apply to voluntary abatement, remediation, and reclamation of abandoned mine lands.

iii. Maritime Provinces

NOVA SCOTIA

Nova Scotia's *Environment Act* ("NEA")¹⁷⁴ contains many of the typical elements of provincial environmental legislation noted above that also apply to mining activity. These include (1) requirements for approvals;¹⁷⁵ (2) spill response measures;¹⁷⁶ and (3) issuance of orders.¹⁷⁷

There are several aspects of Nova Scotia environmental law, policy, or practice that merit comment in the context of abandoned mine land abatement, remediation, and reclamation. These include:

1. Variance authority; and
2. Orphan contaminated site rehabilitation agreements.

¹⁷² *Ibid.*, s. 31.43.

¹⁷³ *Ibid.*, s. 31.57.

¹⁷⁴ S.N.S. 1994-95, c. 1.

¹⁷⁵ *Ibid.*, ss. 50, 56. The construction, operation, or reclamation of various mineral activities are designated by regulations as requiring approvals from the Minister. *Activities Designation Regulations*, N.S. Reg. 47/95, ss. 3, 16.

¹⁷⁶ S.N.S. 1994-95, c. 1, Part VI (release of substances).

¹⁷⁷ *Ibid.*, Part XIII (orders). Administrative orders issued under Part XIII such as control or stop orders impose joint and several liability on persons named in the order.

Variance Authority

The *NEA* allows the holder of an approval to apply to the Minister of Environment for a certificate of variance to vary any term or condition of an approval, or requirement of the regulations. The Minister can issue the variance certificate if the Minister considers that the proposed variance is not likely to cause a significant adverse effect. The Minister may impose terms and conditions on a certificate of variance, specify requirements as to the manner in which the activity may be carried out, or amend the terms and conditions. Certificates of variance under the *NEA* are in effect for the period prescribed in the certificate.¹⁷⁸

The variance authority contained in the *NEA*, like that under Alberta law, may be considered a precedent for the type of "escape valve" authority, with appropriate modification, that could be applied to voluntary abandoned mine land abatement, remediation, and reclamation activity.

Orphan Contaminated Site Rehabilitation Agreements

Part VIII of the *NEA* contains general authority for the province to remediate and rehabilitate contaminated sites. However, the Act also identifies the problem of "orphan contaminated sites." In particular, the Act authorizes the Minister to:

"enter into agreements and establish programs and other measures the Minister considers necessary to pay for the costs of restoring and securing contaminated sites and the environment affected by contaminated sites where a person responsible for the contaminated site cannot be identified or is unable to pay for the costs."¹⁷⁹

The provision does not provide greater specificity regarding development of plans, meeting minimum standards, or exemption from liability under such arrangements. However, the provision does recognize as a matter of law that orphaned sites may require special attention and a different approach than sites where there are financially viable "persons responsible" still around. Accordingly, the provision may be considered a precedent for encouraging voluntary abandoned mine land abatement, remediation, and reclamation activities.

NEW BRUNSWICK

New Brunswick's primary pollution control statutes, the *Clean Environment Act* ("CEA")¹⁸⁰ and the *Clean Water Act* ("CWA")¹⁸¹ contain many of the typical elements of

¹⁷⁸ *Ibid.*, s. 61.

¹⁷⁹ *Ibid.*, s. 86.

¹⁸⁰ *CEA*, S.N.B., c. C-6.

¹⁸¹ *CWA*, S.N.B., c. C-6.1.

provincial environmental legislation noted above that also apply to mining activity. These include (1) approvals for discharges to water;¹⁸² and (3) issuance of orders.¹⁸³

There is one aspect of New Brunswick environmental law, policy, or practice that merits comment in the context of abandoned mine land abatement, remediation, and reclamation. This relates to environment ministry approval authority for mining leases.

Environment Ministry Approval Authority for Mining Leases

Under the province's *Mining Act*, a mining lease cannot be granted by the Ministry of Natural Resources and Energy until the Minister of Environment and Local Government has approved the applicant's program for protection, reclamation, and rehabilitation of the environment.¹⁸⁴

Although mining activities are always subject to prior approval under environmental legislation before they may proceed, this type of explicit authority in a mining statute for sign-off by an environment agency before a mining lease is granted is fairly unusual in Canada. In the context of voluntary abandoned mine land abatement, remediation, and reclamation, this type of authority would constitute a further regulatory obligation to be complied with, particularly by those considering remining activity.

NEWFOUNDLAND AND LABRADOR

Newfoundland and Labrador's *Environmental Protection Act* ("NLEPA")¹⁸⁵ contains many of the typical elements of provincial environmental legislation noted above that also apply to mining activity. These include (1) requirements for approvals;¹⁸⁶ (2) spill response measures;¹⁸⁷ and (3) issuance of orders.¹⁸⁸

There is one aspect of Newfoundland and Labrador environmental legislation that merits comment in the context of abandoned mine land abatement, remediation, and reclamation. This relates to contaminated site rehabilitation agreements.

Contaminated Site Rehabilitation Agreements

Part VII of the *NLEPA* contains general authority for the province to remediate and rehabilitate contaminated sites. However, the Act also acknowledges that persons responsible for a contaminated site may not be identified or may be unable to pay for the

¹⁸² *CEA*, s. 12. See also *CEA - Water Quality Regulations*, N.B. Reg. 82-126, s. 3 (prohibition on any person without an approval discharging a contaminant into the environment that may directly or indirectly cause water pollution to any waters of the province).

¹⁸³ *CEA*, s. 5; *CWA*, s. 4 (Ministerial orders).

¹⁸⁴ *Mining Act*, S.N.B., c. M-14.1, s. 68(2) (explicit authority for Ministry of Environment and Local Government to approve application for mining lease before it may be granted).

¹⁸⁵ S.N.L. 2002, c. E-14.2.

¹⁸⁶ *Ibid.*, Part XI (approvals).

¹⁸⁷ *Ibid.*, Part III (release of substances, including spills).

¹⁸⁸ *Ibid.*, Part XIII (orders).

costs of rehabilitation. Therefore, the Act authorizes the Minister to enter into compliance agreements "and other agreements" and establish programs and other measures the Minister considers necessary to restore and secure a contaminated site and the surrounding environment and pay for the costs of doing so. Moreover, the Act explicitly recognizes that this may be done "whether or not a person responsible for a contaminated site cannot be identified or is unable to pay for those costs."¹⁸⁹

The above provision of the law of Newfoundland and Labrador is similar to that of Nova Scotia discussed above with respect to orphan contaminated sites. As with the Nova Scotia provision, the Newfoundland and Labrador provision does not provide greater specificity regarding development of plans, meeting minimum standards, or exemption from liability under such arrangements. However, the provision does recognize as a matter of law that such sites (effectively orphan sites) may require special attention and a different approach than sites where there are financially viable "persons responsible" still around. Accordingly, the Newfoundland and Labrador provision, like that under Nova Scotia law, may be considered a precedent for encouraging voluntary abandoned mine land abatement, remediation, and reclamation activities.

iv. Summary

Based on the above review, provincial environmental laws in Canada contain the following characteristics that may constitute **regulatory and institutional barriers** to voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Approval, licence, permit, plan, and regulation requirements* designed to prevent or minimize the discharge or release of contaminants into the environment that would have to be complied with as a condition precedent to being authorized to undertake such activities. These various requirements do not differentiate between new or active mining operations on the one hand, and abandoned mine land abatement, remediation, and reclamation activities on the other. Accordingly, these statutory and regulatory requirements would hold voluntary cleanups to the same standards of conduct, performance, and results as new or active mining operations.

Based on the above review, provincial environmental laws in Canada contain the following characteristics that may constitute **liability disincentives** to voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Quasi-criminal liability resulting in prosecution* for violating prohibitions, approvals, permits, licences, plans, and provisions of regulations under various provincial environmental laws;

¹⁸⁹ *Ibid.*, s. 25.

- *Liability imposed by administrative order* on "responsible persons" to prevent, abate, remediate, or rehabilitate general environmental damage arising from owning, occupying or having charge, management, or control of a source of contaminant also may attach to volunteers;
- *Civil (and administrative) absolute, retroactive, joint and several liability* imposed by statute on responsible persons for contaminated sites also may attach to volunteers, subject to the protections and exemptions available under some provincial laws noted below;
- *Civil liability* of responsible persons under environmental rights and spills statutory provisions as well as the common law for injunctive, monetary, or other relief may attach to volunteers. However, in practice the problem may be more theoretical than actual due to a variety of technical and financial obstacles to bringing such actions in the courts.

Based on the above review, provincial environmental laws in Canada contain precedents for the following **collaborative opportunities** in respect of voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Partial exemption from liability for historic mine site contamination* for those seeking to remine such sites as has recently been enacted in one province;
- *Variance authority* that acts as an "escape valve" from generally applicable environmental requirements such as approvals and regulations, is authorized by the laws of some provinces under certain circumstances and subject to certain obligations, such as consultation with those who may be directly affected by the proposed variance;
- *Exemptions for secured creditors* from being held as persons responsible for cleanup in certain circumstances are a potential precedent under several provincial laws that could be extended to abandoned mine land volunteers;
- *Orphan contaminated site rehabilitation agreements* are authorized in several provinces and constitute a precedent for a more sophisticated approach of this type for volunteers in the abandoned mine land context;
- *Limitations of liability* of responsible persons through a variety of apportionment, allocation, minor contributor, and other measures have been legislated under provincial environmental laws and constitute

precedents for more equitable treatment of abandoned mine land volunteers;

- *Orphan site designations, contaminated site registries, and non-compliance reports* are precedents under provincial law and practice for the development of a comprehensive list or registry of "abandoned mine land sites" and their status on a province-by-province basis that could assist those prioritizing collaborative voluntary cleanup of such sites.

d. Provincial Mining Laws

Historically, provincial mining laws have shared many of the same characteristics because they are based on Crown ownership and exploitation of mineral resources. Most provincial mining laws set out the manner in which the Crown may dispose of its minerals and others may obtain rights to them. As environmental concerns with respect to mining activities have increased in recent years, they largely have been addressed by environmental legislative reforms. However, certain stages of mining operations, including exploration, reclamation, and rehabilitation also have seemed particularly well suited to be regulated under mining laws. However, with some exceptions, mining laws generally have not addressed the issue of long-abandoned mine sites and what special measures may be necessary to facilitate their abatement, remediation, or reclamation. In part, this may be a function of the perception that, to the extent such matters are to be addressed as a matter of law, it should be done under environmental legislation. The following points address some of these issues in regard to mining laws.

i. Western Provinces

BRITISH COLUMBIA

The *Mines Act*, administered by the Ministry of Energy and Mines, is the primary statutory authority regulating mining activity in the province. The *Mines Act* regime for regulating mines, including the environmental impact of mines, is based on a permit system. With some exceptions, an owner must obtain a permit before commencing any work on the mine, and file a plan of the proposed work and a program for the protection and reclamation of the land and watercourses affected by the mine.¹⁹⁰

There are several aspects of British Columbia mining law, policy, or practice that merit comment in the context of abandoned mine land abatement, remediation, and reclamation. These include:

1. Variance authority may be too narrow to apply to voluntary initiatives;

¹⁹⁰ *Mines Act*, R.S.B.C. 1996, c. 293, s. 10. Recent amendments to the *Mines Act*, proposed in May 2002, could exempt owners from the permit requirement.

2. Definition of "abandoned" mines may be too narrow or inappropriate; and
3. Provisions addressing "abandoned" mines may frustrate or encourage voluntary cleanup of such sites.

Variance Authority may be too Narrow to Apply to Voluntary Initiatives

Under British Columbia's *Mines Act* a manager, appointed under the Act to be responsible for the management or operation of a mine, may request a variance of a provision of the regulations or Code established under the Act. The provincial chief inspector for mines may approve the variance if he or she believes the provision to be varied does not operate in the best interest of, or is not necessary to, health and safety in an individual mine.¹⁹¹ This variance authority may be too narrow to apply with respect to voluntary environmental abatement, remediation, or reclamation activity at abandoned mines, particularly because there are few, if any, provisions in the regulations or Code that address environmental matters at that stage.

Definition of "Abandoned" Mines may be too Narrow or Inappropriate

Under British Columbia's *Mines Act*, an abandoned mine is defined as "a mine for which all permit obligations under [the] Act have been satisfied and in respect of which the mineral claims have reverted to the government."¹⁹² This definition appears too narrow or inappropriate in its application to long abandoned/orphaned mine land sites where permit obligations often *have not been satisfied*.

Provisions Addressing "Abandoned" Mines may Frustrate (or Encourage) Voluntary Clean-up of such Sites

The *Mines Act* of British Columbia also authorizes provincial inspectors to undertake work in connection with an abandoned mine in order to avoid danger to persons, to property, or to abate pollution of the land and watercourses affected by the mine. The costs of such work are to be paid from the provincial consolidated revenue fund, and they become a debt due to the government, and form a lien and charge on the mine or mineral title in favour of the government. The Act requires that no transfer of title or other dealing with the mine may take place until the debt is paid and notice of debt, registered on title, is cancelled. The Act further permits the Minister, with or without payment and on such conditions as the Minister may impose, to cancel the notice and allow the mine to be transferred or otherwise dealt with.¹⁹³ As drafted, this authority may either frustrate or encourage voluntary abandoned mine land abatement, remediation, or reclamation.

¹⁹¹ *Ibid.*, s. 13.

¹⁹² *Ibid.*, s. 1.

¹⁹³ *Ibid.*, s. 17.

ALBERTA

The purposes of Alberta's *Coal Conservation Act* ("CCA") include assisting the government in controlling pollution and ensuring environmental conservation in the development of coal resources in the province.¹⁹⁴ Regulations under the CCA also require that the mine operator must carry out a program of environmental management within a mine site (defined as both mines and coal processing plants) for which the operator holds a permit. This must include pollution control and surface abandonment and reclamation, in a manner satisfactory to the Alberta Resources Conservation Board (the "Board").¹⁹⁵ The Board may enforce the requirements of the Act and regulations through prosecution or injunction.¹⁹⁶ The Act and regulations address the issue of both abandoned mines and abandoned coal processing plants.

There are several aspects of Alberta mining law that merit comment in the context of voluntary abandoned mine land abatement, remediation, and reclamation. These include:

1. Requirements to obtain licences and approvals and provide information before operations may commence at abandoned mines or plants;
2. Requirements to obtain consent before abandoning mines or plants.

Requirements to obtain licences and approvals and provide information before operations may commence at abandoned mines and plants

The CCA requires that before a person begins mining operations at an abandoned mine that it apply for and obtain a licence from the Board.¹⁹⁷ Such application must be accompanied by a proposed scheme for reclamation of all land that may be disturbed.¹⁹⁸ The Act also requires that before a person resumes operations at an abandoned coal processing plant that it obtain prior approval from the Board. Such application must be accompanied by an outline of what steps are proposed for controlling pollution from the plant.¹⁹⁹ The regulations require that an application for a licence to commence commercial mining operations at an abandoned mine,²⁰⁰ or to resume operations at an abandoned coal processing plant must include certain information.²⁰¹

¹⁹⁴ R.S.A. 2000, c. C-17, s. 4(e).

¹⁹⁵ *Coal Conservation Regulations*, Alta. Reg. 270/81, s. 26 (as consolidated up to Alta. Reg. 314/2000).

¹⁹⁶ R.S.A. 2000, c. C-17, ss. 47-49 (prosecution), 50 (injunction).

¹⁹⁷ *Ibid.*, s. 11(b).

¹⁹⁸ *Ibid.*, s. 12.

¹⁹⁹ *Ibid.*, ss. 23(1)(b), 23(2)(b).

²⁰⁰ *Coal Conservation Regulations*, Alta. Reg. 270/81, s. 9 (plans, a statement about conditions of the mine workings, including with respect to water, and proposed procedures for restoring the mine workings).

²⁰¹ *Ibid.*, s. 15 (a description of existing plant, including potential safety hazards, and procedures to be used for restoring the plant).

These requirements would have to be complied with by those proposing to voluntarily abate, remediate, or reclaim orphaned/abandoned mine lands.

Requirements to obtain consent before abandoning mines or plants

The Act also requires that licencees not abandon a mine without prior Board permission. This permission does not relieve the licensee or other liable person of the obligation to take further abandonment operations that may become necessary in future.²⁰² The Board also may perform abandonment operations and obtain payment from the performance bond or deposit that the regulations require of the permit or licence holder.²⁰³ The regulations also require that an application to the Board for consent to abandon a mine or a coal processing plant be accompanied by certain information.²⁰⁴

It would appear that these requirements would have to be complied with by those who voluntarily abated, remediated, or reclaimed orphaned/abandoned mine lands and later wish to "re-abandon" the mine or plant.

SASKATCHEWAN

The *Crown Minerals Act* ("CMA") requires the Minister to cancel any disposition of resources for which an environmental assessment determines that the development should not proceed and the provincial cabinet, on the advice of the environment minister, so directs the minister. Upon cancellation, the former holders of the Crown disposition are entitled to compensation but no other remedy against the Crown.²⁰⁵ This authority has been described by commentators as linking the management of minerals with management of the environment.²⁰⁶

However, the CMA is silent on the issue of abandoned mines leaving the issue to be dealt with under provincial environment legislation.²⁰⁷ In this regard, a number of provinces, including Saskatchewan, are in the process of assessing the status of

²⁰² R.S.A. 2000, c. C-17, s. 16.

²⁰³ *Ibid.*, s. 17.

²⁰⁴ *Ibid.*, ss. 12(1)(d)-(g) (for consent to abandon underground mines information must include details concerning any waters that may enter or be discharged from the mine workings after abandonment, methods proposed for control of effluents from the abandoned mine workings, information on stability of discard disposal areas, and methods used or proposed for abandoning and reclaiming disturbed areas), 12(2)(d) (for consent to abandon a surface mine information must include details of the proposed surface abandonment and reclamation program and the current status of any previously initiated abandonment and reclamation program), 19(2)(b)-(e) (for consent to abandon a plant information must include description of procedures for abandoning plant, cross-sections of the discard disposal areas, details of the stability of remaining coal storage piles, discard disposal areas and emergency discharge ponds following reclamation, and general description of the abandonment and reclamation program and its probable impact on the environment, including measures to be taken to control pollution).

²⁰⁵ S.S. 1984-85-86, c. C-50.2, s. 10.1.

²⁰⁶ B.J. Barton, *Canadian Law of Mining* (Calgary: Canadian Institute of Resources Law, 1993) at 21.

²⁰⁷ See *SEMPA - The Mineral Industry Environmental Protection Regulations, 1996*, Sask. Reg. c. E-10.2, Reg. 7, s. 19 (Minister of Environment may determine that when all or part of a mining site has been abandoned, or a person responsible for the site's decommissioning and reclamation plan has become insolvent, a default in respect of an assurance fund for a mining site has occurred).

abandoned mines in their jurisdiction, or beginning the process of rehabilitating them, usually with public funds. Even where provincial legislation prohibits the abandonment of a mine, many provinces face potential environmental, health, and safety problems from long abandoned mines.²⁰⁸ The initiative in Saskatchewan is important in addressing the abandoned mine lands problem in the province. However, the province has not reformed either its environmental or mining legislation to address specifically opportunities to encourage and, if necessary, protect voluntary abandoned mine clean-up initiatives.

MANITOBA

The Manitoba *Mines and Minerals Act* ("MMA") declares that the object and purpose of the statute is to provide for, promote, encourage, and facilitate exploration, development, and production of minerals and mineral products in Manitoba, consistent with principles of sustainable development.²⁰⁹

The Act further defines sustainable development principles to include the following. First, integration of decisions respecting the economy and mining with environmental protection. Second, economic development and environmental preservation for the benefit of present and future generations. Third, the need to prevent or minimize environmental hazards from mineral development by avoiding policies, programs, and decisions that have significant adverse environmental or economic impact. Fourth, the application of conservation policies and practices that enables mineral extraction to proceed in an environmentally and economically wise manner. Fifth, recycling of mining waste by-products to enable re-use, reduction, or recovery of the by-products. Sixth, rehabilitation of lands damaged by mining activity.²¹⁰ Other provisions of the MMA authorize establishment of a mine rehabilitation fund,²¹¹ and the promulgation of rehabilitation regulations to ensure environmental protection.²¹²

There are several aspects of Manitoba mining law and policy that merit comment in the context of voluntary abandoned mine land abatement, remediation, and reclamation. These include:

1. Remediation and reclamation authority under the regulations focuses on "closed" mines where a viable owner remains responsible for the site and fails to define or address "orphaned/abandoned" mines;
2. The absence of specific statutory authority for encouraging voluntary initiatives results in an ad hoc government abandoned mine cleanup program paid for with public funds.

²⁰⁸ Saskatchewan Environment, News Release, "Assessing Northern Abandoned Mines" (September 18, 2001)(noting release of interim report on the health, safety, and environmental risks of abandoned mines in northern Saskatchewan).

²⁰⁹ S.M. 1991-92, c. 9 C.C.S.M., c. M162, s. 2(1).

²¹⁰ *Ibid.*, s. 2(2).

²¹¹ *Ibid.*, s. 195.

²¹² *Ibid.*, s. 230(ee).

Remediation and Reclamation Authority under the Regulations Focuses on "Closed" Mines Where a Viable Owner Remains Responsible for the Site and Fails to Define or Address "Abandoned " Mines

Manitoba's *Mine Closure Regulation* under the *MMA* assumes the existence of a viable owner or operator upon whom reclamation or rehabilitation conditions can be imposed on closed or closing mines.²¹³ The province's regulation does not define or address orphaned/abandoned mines.

The Absence of Specific Statutory Authority for Encouraging Voluntary Initiatives Results in an Ad Hoc Government Abandoned Mine Clean-up Program Paid for with Public Funds

Like Saskatchewan, Manitoba is in the process of assessing the status of abandoned mines in the province and beginning the process of rehabilitating them, with public funds.²¹⁴ This initiative is important in addressing the abandoned mine lands problem in the province. However, Manitoba has not reformed its legislation to address specifically opportunities to encourage and, if necessary, protect voluntary abandoned mine clean-up initiatives.

ii. Central Canada

ONTARIO

The purpose of Ontario's *Mining Act* is to encourage prospecting, staking, and exploration for the development of mineral resources, and to minimize adverse effects on the environment through the rehabilitation of mining lands in the province.²¹⁵ Provisions of the Act have been used to protect the environment from mining activities through administrative mechanisms and the courts.²¹⁶

There are several aspects of Ontario mining law and policy that merit comment in the context of voluntary abandoned mine land abatement, remediation, and reclamation. These include:

²¹³ Mine Closure Regulation, Man. Reg. 67/99.

²¹⁴ Manitoba Government, News Release, "Province to Begin Process of Rehabilitating Abandoned Mines in Northern Manitoba" (July 18, 2001) (noting that the province is investing \$2 million to begin the process of rehabilitating abandoned mines in northern Manitoba by capping and closing mine shafts and fencing off such sites, assessing environmental health risks, and mitigating impacts).

²¹⁵ R.S.O. 1990, c. M.14, s. 2.

²¹⁶ See *e.g. Conwest Exploration Co. v. Ontario (Ministry of Northern Development and Mines)* (1996), 20 C.E.L.R. (N.S.) 208 (Ont. Div. Ct.) (a ruling of the mining commissioner was upheld on appeal that mineral rights included the right to extract minerals from tailings on the surface of lands and therefore carried a correlative obligation under s. 139 of the Act, respecting the requirement at the time to submit a closure plan to rehabilitate abandoned mine sites, and take steps to protect the environment from the effects of the tailings).

1. Remediation and reclamation authority under the regulations focuses on "closed" mines where a viable owner remains responsible for the site and fails to define or address "orphaned/abandoned" mines;
2. The absence of specific statutory authority for encouraging voluntary initiatives results in an ad hoc government abandoned mine cleanup program paid for with public funds.

Remediation and Reclamation Authority under Ontario Mining Law Focuses on "Closed" Mines Where a Viable Owner Remains Responsible for the Site and Fails to Define or Address "Abandoned " Mines

Like Manitoba law, Ontario mining law assumes the existence of a viable owner or operator upon whom reclamation or rehabilitation conditions can be imposed on closed or closing mines.²¹⁷ Ontario law now does not define or address orphaned/abandoned mines.²¹⁸

The Absence of Specific Statutory Authority for Encouraging Voluntary Initiatives Results in an Ad Hoc Government Abandoned Mine Clean-up Program Paid for with Public Funds

Like Saskatchewan and Manitoba, Ontario is in the process of assessing the status of abandoned mines in the province and beginning the process of rehabilitating them with public funds.²¹⁹ This initiative is important in addressing the abandoned mine lands problem in the province:

"Some of Ontario's abandoned mine sites are more than a century old, and while companies may not have closed out the site in a manner that meets today's standards, the lands have already reverted to the Crown. Other privately held lands may become the Crown's responsibility in extreme circumstances such as a business failure or receivership. There are also combinations of circumstances that will prompt the government to address serious or immediate risks on a privately owned site: for example, when a company is in receivership and there are emergency situations that may place public safety or health at risk."²²⁰

However, Ontario, like Saskatchewan and Manitoba, has not reformed its legislation to address specifically opportunities to encourage and, if necessary, protect voluntary abandoned mine clean-up initiatives.

²¹⁷ Mine Development and Closure Under Part VII of the Act, O. Reg. 240/00.

²¹⁸ Before amendments that came into force in 1997, the former section 139 of the *Mining Act* defined "abandoned" as meaning that "the proponent has ceased or suspended indefinitely advanced exploration, mining, or mine production on the site, without rehabilitating the site."

²¹⁹ Ontario Ministry of Northern Development and Mines, *Abandoned Mines Rehabilitation Program* (Toronto: ONDM, 2002) (noting that in September 1999 the province announced a four-year \$27 million program to rehabilitate lands that are former mine sites).

²²⁰ Ibid.

QUEBEC

As a result of 1995 amendments, the *Mining Act* now imposes greater obligations on the Quebec mining industry to rehabilitate and restore the environment from the adverse effects of mining activities. The environmental restoration obligations apply to open-pit or underground mines and tailings areas, identify who must carry out such work, and particularize what must be done. The rehabilitation and restoration framework has been described as an "extremely exacting" regime.²²¹ However, the Quebec statutory regime is similar to that of Manitoba and Ontario. It focuses on the existence of a viable past or present owner or operator upon whom reclamation or rehabilitation conditions can still be imposed, and not on fostering the involvement of volunteers in orphaned/abandoned site cleanups.

iii. Maritime Provinces

NOVA SCOTIA

Nova Scotia's *Mineral Resources Act* ("MRA")²²² provides the legislative framework for issuing permits and leases to mining operations in the province. The Act requires that areas where waste rock and tailings are deposited must be reclaimed to the satisfaction of the Minister of Natural Resources.²²³ Surrender or abandonment does not absolve, for example a lessee, from the obligation to reclaim mining lands.²²⁴ The *MRA* authorizes the provincial cabinet to make regulations addressing such matters as:

1. Disposal of tailings, slimes, waste products or any noxious or deleterious substance or contaminant upon any lands or waters;
2. Restoration and rehabilitation of a mine or mining lands;
3. Reopening and abandoning mines; and
4. Protection, reclamation, and rehabilitation of the environment before mining commences, during mining, and after mining is discontinued.²²⁵

Mineral Resources Regulations have been promulgated under the Act.²²⁶

Provincial mineral policy includes ensuring protection of the environment. The policy states that the province will identify opportunities for and promote reclamation of abandoned mine sites. In this regard, the policy notes that:

²²¹ P.R. Granda & O. Nadon, "The Mining Industry and the Restoration of the Environment in Quebec," (1995) 18 C.E.L.R. (N.S.) 197 at 218.

²²² R.S.N.S. 1990, c. 18.

²²³ *Ibid.*, s. 75.

²²⁴ *Ibid.*, s. 74.

²²⁵ *Ibid.*, s. 174(1)(mja)(b)(h)(i).

²²⁶ *Mineral Resources Regulations*, N.S. Reg. 30/91 as amended by N.S. Reg. 12/97.

"Abandoned mines...provide evidence of a legacy of past practices when environmental effects and long-term socio-economic impacts were not adequately considered by industry or government. The Department [of Natural Resources] is aware of the social, economic and environmental impacts of abandoned mine sites and will work with industry, and other departments and levels of government to identify ways and means for reclaiming abandoned mine sites.

Specifically, the Department will:

- Explore funding mechanisms to reclaim old mine sites, concentrating on those that pose the greatest risk to environmental health and human safety;
- Provide information and technical assistance to responsible parties for the clean-up and safety of abandoned sites;
- Encourage industry to explore, develop and eventually reclaim old mine sites."²²⁷

However, Nova Scotia, like most other provinces has not reformed its legislation to address specifically opportunities to encourage and, if necessary, protect voluntary abandoned mine clean-up initiatives.

NEW BRUNSWICK

In New Brunswick, the *Mining Act*, administered by the Department of Natural Resources and Energy, addresses exploration, development, construction, production, and reclamation phases of mining activity in the province.²²⁸ Conditions for granting various instruments or entitlements under the Act, such as mining leases, include ensuring protection, reclamation, and rehabilitation of the environment during and on discontinuance of mining activity.²²⁹ As noted above, under the *Mining Act*, a mining lease cannot be granted by the Ministry of Natural Resources and Energy until the Minister of Environment and Local Government has approved the applicant's program for protection, reclamation, and rehabilitation of the environment.²³⁰ Mining lessees also must institute and carry out a program for protection of the environment affected by their operations. In addition, they must undertake and complete a program for reclamation and rehabilitation of the environment affected by such operations and leave the environment in a condition satisfactory to the Minister of Natural Resources and Energy.²³¹

New Brunswick also has not reformed its legislation to address specifically opportunities to encourage and, if necessary, protect voluntary abandoned mine clean-up initiatives.

²²⁷ Nova Scotia Department of Natural Resources, *Minerals - A Policy for Nova Scotia* (Halifax: DNR, 1996) at Chapter 3, Policy 5.

²²⁸ S.N.B. 1985, c. M-14.1.

²²⁹ *Ibid.*, s. 68(1).

²³⁰ *Ibid.*, s. 68(2).

²³¹ *Ibid.*, s. 78.

NEWFOUNDLAND AND LABRADOR

In Newfoundland and Labrador, the *Mining Act*, administered by the Department of Mines and Energy, addresses the operation of mines and mills in the province.²³² The Act defines a mine to include one that has been "rendered inactive, closed out or abandoned as well as lands where tailings or waste rock or both or any other substance...have been deposited within the geographic area described in a lease."²³³ The Act also defines "abandoned" to mean a "condition in which a project [mine or mill] has ceased or has been suspended indefinitely without being rehabilitated."²³⁴

The *Mining Act* imposes obligations on those holding entitlements under the Act to engage in progressive rehabilitation, and to develop and submit to the Minister a rehabilitation and closure plan.²³⁵ The Act also authorizes the Minister to undertake rehabilitation where it has not been performed.²³⁶ Regulations promulgated under the Act elaborate on these obligations.²³⁷

As is the case with the mining laws of other provinces, the law of Newfoundland and Labrador assumes the existence of a viable owner or operator upon whom reclamation or rehabilitation conditions can be imposed on closed or closing mines, or else the existence of an adequate security fund.

The province acknowledges that its mining legacy has resulted in at least 70 abandoned mines throughout the island, and that the province started its first abandoned mine rehabilitation project in 1985.²³⁸ However, Newfoundland, like other provinces, has not reformed its legislation to address specifically opportunities to encourage and, if necessary, protect voluntary abandoned mine clean-up initiatives.

iv. Summary

Based on the above review, provincial mining laws in Canada contain the following characteristics that may constitute **regulatory and institutional barriers** to voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Statutory Focus on "Closed" rather than on Orphaned/Abandoned Mines* - mining law remediation and reclamation authority often focuses on "closed" mines where a viable owner remains responsible for the site, or for which satisfactory securities are assumed to exist.

²³² S.N. 1999, c. M-15.1.

²³³ *Ibid.*, s. 2(i).

²³⁴ *Ibid.*, s. 2(a).

²³⁵ *Ibid.*, ss. 8-9.

²³⁶ *Ibid.*, s. 13.

²³⁷ *Mining Regulations*, N. Reg. 42/00.

²³⁸ Newfoundland and Labrador Department of Mines and Energy, *Mineral Resource Information: Vol. 3, No. 3* (St. John's: NLDME, 1997).

Provincial mining laws often fail to even define, let alone address, the "orphaned/abandoned" mine situation;

- *Narrow or inappropriate definitions of "abandoned" mines* - where provincial laws do define "abandoned" mines, some define them too narrowly or inappropriately to be of assistance to volunteers;
- *Inconsistent approach to abandoned mines where issue is addressed* - where mining laws address "abandoned" mines their provisions may either frustrate or encourage voluntary cleanups of such sites. However, statutory provisions of this type are so vague, general, or lack follow-through that they provide no true guidance to the would-be volunteer;
- *Requirements to obtain (1) licences and approvals and provide information before operations may commence at abandoned mines and plants and (2) consent before abandoning mines or plants* - provisions of this type found in at least one mining law may be considered both a potential barrier or a potential collaborative opportunity. They may constitute a barrier if the compliance expected is that of the ordinary new or existing mining operation. They may constitute a collaborative opportunity if they recognize, encourage, and protect the volunteer's special role in orphaned/abandoned mine cleanups;
- *Absence of specific statutory authority for encouraging voluntary initiatives* - may be considered a further barrier in that the lack of such a focus in mining legislation has contributed to a number of ad hoc government abandoned mine cleanups paid for with public funds. While these are of great value, they detract from the need to focus on establishing a framework for responsible encouragement and protection of volunteers.

Based on the above review, provincial mining laws in Canada may contain the following characteristics that may constitute **liability disincentives** to voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Quasi-criminal, civil, and administrative liability* for failing to comply with legislative and regulatory requirements pertaining to leases, licences, approvals, plans, and other instruments or entitlements provided under mining laws.

Based on the above review, provincial mining laws, policies, and practices in Canada contain precedents for the following **collaborative opportunities** in respect of voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Variance authority* - of value for the same reasons set out under the discussion of environmental laws. However, the variance authority noted under several mining laws tended to be too narrow to apply to voluntary initiatives;
- *Ad hoc government abandoned mine cleanups* - although a potential barrier for the reasons set out above, also have been valuable in establishing cooperative efforts among government and non-government stakeholders in identifying sites, problems, and solutions.

B. United States

1. Federal

There are three broad areas of federal law in the United States applicable to the issue of abandoned/orphaned mine lands and their abatement, remediation, or reclamation. First, there is surface mining legislation administered by the United States Department of the Interior ("USDOI"). Second, there is clean water legislation administered by the United States Environmental Protection Agency ("USEPA"). Third, there are hazardous waste laws and, in particular, their liability provisions, also administered by USEPA.

There also have been a number of legislative proposals in the Congress of the United States that address several subjects that are the focus of this study (e.g. good samaritan legislation).

a. Federal Surface Mining Law

The *Surface Mining Control and Reclamation Act of 1977* ("SMCRA") is a comprehensive federal statute designed to "establish a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations."²³⁹ The Act creates the Office of Surface Mining Reclamation and Enforcement ("OSMRE"), within the USDOI, which is responsible for administering the Act by, among other things, promulgating regulations and enforcing its provisions.²⁴⁰ State governments may assume jurisdiction over operations within their borders on non-federal lands by developing a regulatory program meeting standards under *SMCRA* and approved by OSMRE.²⁴¹

²³⁹ 30 U.S.C.A. § 1202(a) (West 2002).

²⁴⁰ *Ibid.*, § 1211(c) (West 2002).

²⁴¹ *Ibid.*, § 1253 (West 2002).

Under *SMCRA*, no person may engage in surface coal mining operations without a permit from the appropriate federal or state regulatory authority.²⁴² The Act requires that applicants file a schedule listing any notices of violations they have received in the prior three years and the final resolution of any such notices. Where that or other information indicates that any surface coal mining operation "owned or controlled by the applicant" is currently in violation of *SMCRA*, "the permit shall not be issued" until the applicant submits proof that the violation has been or is being corrected.²⁴³

In 1997, a panel of the United States Court of Appeals struck down OSMRE "ownership and control" rules that were to have been administered by federal or state regulatory authorities, which were broader than *SMCRA*. The rules would have required regulatory authorities to not issue a permit if any operation owned or controlled by a permit applicant "or by any person who owns or controls the applicant" is currently in violation of *SMCRA*. The regulatory authorities would have been prohibited from issuing the permit until the applicant submits proof that the violation has been or is being corrected.²⁴⁴

However, in April 2002, OSMRE approved a state regulatory authority's proposed changes to its state program that imposed a "permit block" on any applicant, or any person who owns or controls the applicant, who is currently in violation of federal or state law. In approving substantially the same provision as the court struck down in 1997, OSMRE relied on other provisions of *SMCRA* than those struck down by the court in 1997. These other provisions allow states to enact laws or regulations that provide for "more stringent land use and environmental controls and regulations of surface coal mining and reclamation operations" than are provided for in *SMCRA*. Accordingly, to the extent that the state law authorized more extensive "permit blocking," OSMRE was of the view that it was not inconsistent with *SMCRA* and, therefore, was approved.²⁴⁵

The permit blocking provisions of *SMCRA* are of importance in the context of abandoned mines because they may prevent a person who otherwise may be in violation of *SMCRA* from obtaining a permit to "remine" an abandoned mine. They also may prevent that person from acting as a "volunteer" in the abatement, remediation, or reclamation of such sites.

b. Federal Clean Water Law

Under the *Clean Water Act* ("CWA"), absent a permit, the discharge of any pollutant by any person is unlawful.²⁴⁶ The "discharge of any pollutant" means the addition of any pollutant to navigable waters from any point source. A "point source" is

²⁴² *Ibid.*, § 1256(a) West 2002).

²⁴³ *Ibid.*, § 1260(c) (West 2002).

²⁴⁴ *National Mining Association v. United States Department of the Interior*, 105 F.3d 691, 693 (D.C. Cir. 1997).

²⁴⁵ *Kentucky Regulatory Program*, 67 Fed. Reg. 21173-21176 (2002) (referring to 30 U.S.C.A. § 1255(b) (West 2002)).

²⁴⁶ 33 U.S.C.A. § 1311(a) (West 2002).

defined under CWA to mean "any discernible, confined, and discrete conveyance...from which pollutants are or may be discharged." A "pollutant" is defined to include "...solid waste....chemical wastes...wrecked or discarded equipment, rock, sand...and industrial waste...discharged into water." The CWA defines "navigable waters" to include the "waters of the United States...and tributaries..."²⁴⁷

The cumulative effect of these various definitions give the CWA broad scope. Accordingly, this has resulted in several courts holding that abandoned mine land abatement, remediation, and reclamation projects require permits. Such requirements, it has been suggested, discourage abandoned mine land cleanups, even where such cleanups would reduce water pollution.²⁴⁸

There is authority for the issuance of variances from compliance with CWA requirements that may have limited applicability to abandoned mine land abatement, remediation, and reclamation projects. The first variance is based on fundamentally different factors ("FDF"). If an existing source of water pollution is fundamentally different, an FDF variance may be available under certain circumstances. The source must participate in the rulemaking process, and demonstrate the difference that makes compliance with best practicable or achievable standards impossible. The FDF variance is not based on inability to afford compliance with applicable standards. Rather it is based on fundamentally different technological factors that make it impossible for the source to comply with applicable standards. FDF variances also may apply to vary compliance with CWA standards applicable to toxic substances.²⁴⁹

The second possible variance available under the CWA is known as the "affordability" variance. This variance applies only to Best Achievable Technology ("BAT") standards, not to Best Practicable Technology ("BPT") standards. Unlike the FDF variance, which is implemented through the rule-making process, the affordability variance is implemented through the permit process, and is based on costs. The source must show that it cannot afford BAT. If successful, a specific standard is set for the source in its permit somewhere between BAT and BPT. However, unlike the FDF variance, an affordability variance, must be limited as to the period of time it can be in effect, and cannot apply to toxic substances.²⁵⁰

Rather than follow either the FDF or affordability variance approach to addressing water pollution from abandoned coal mines USEPA, in January 2002, promulgated amendments to existing coal mining regulations under the CWA to reduce run-off from these sites. The amendments cover only discharges from previous mining activities on mine lands that have been abandoned (defined as "pre-existing" discharges). Pre-existing discharges will now be distinguished under the amendments from new discharges from active mining areas. Prior to the amendments, according to the agency, requiring pre-existing discharges to be treated so as to meet the same standards as

²⁴⁷ *Ibid.*, §§ 1362(12)(14)(19)(7) (West 2002).

²⁴⁸ *Supra* note 13.

²⁴⁹ 33 U.S.C.A. § 1311(n) (West 2002).

²⁵⁰ *Ibid.*, § 1311(c) (West 2002).

discharges from active mining areas, was cost prohibitive, and a disincentive to remining activities.

Accordingly, the effect of the new rules is to facilitate coal remining at abandoned sites. The agency concluded that remining of abandoned mine lands has many potential benefits. Problems associated with abandoned mines, such as acid mine drainage, are addressed during remining as the area is reclaimed. Thus, according to USEPA, encouraging remining can provide the benefits of improving water quality, removing hazardous conditions, and utilizing remaining coal as a resource instead of mining new land. According to the agency, because of concerns over potential liabilities and environmental compliance costs, many operators have focused their efforts on new mining areas and have ignored abandoned mine lands that contain significant coal reserves.

Under the amendments, remining operators will be required to implement strategies that control pollutant releases and ensure the pollutant discharges during remining activities are less than the pollutant levels released from the abandoned site prior to remining. To achieve this goal, a coal remining operator must develop a site-specific pollution abatement plan designed to reduce the pollution load from pre-existing discharges. The plan must incorporate the design and implementation of best management practices, based on USEPA guidance. The agency also is requiring that operators ensure that levels of iron, manganese, and pH in pre-existing discharges are not made worse from remining activities.²⁵¹

c. Federal Hazardous Waste Laws

There are two federal hazardous waste laws in the United States with potential applicability to abandoned mine lands. They are the (1) *Comprehensive Environmental Response, Compensation, and Liability Act* ("CERCLA" or "Superfund"); and (2) *Resource Conservation and Recovery Act* ("RCRA").

CERCLA authorizes USEPA to respond to the actual or threatened release of a hazardous substance by conducting the cleanup itself and suing a wide range of responsible parties for reimbursement. Alternatively, the agency may issue an administrative order or seek a court order requiring the responsible parties to conduct the cleanup themselves. A party that receives an administrative order requiring it to cleanup a CERCLA site cannot challenge the order until an enforcement action is brought against it. If it fails at that time to prove that it had "sufficient cause" for not complying with the order, it is liable for up to \$25,000 per day in civil penalties for such non-compliance, as well as treble damages if USEPA proceeds to conduct the cleanup and sues for reimbursement.²⁵²

²⁵¹ Coal Mining Point Source Category: Amendments to Effluent Limitations Guidelines and New Source Performance Standards; Final Rule, 67 Fed. Reg. 3369-3405 (2002) (to be codified at 40 C.F.R. Parts 9 and 434).

²⁵² 42 U.S.C.A. §§ 9604-9607 (West 2002).

Potentially responsible parties that may be required to cleanup, or pay for cleanup, of *CERCLA* sites include:

1. the current owner and operator of the site;
2. any past owners or operators where hazardous substances were disposed of on the site during their ownership or operation;
3. parties that arranged for the disposal or treatment of hazardous substances at the site (e.g. generators); and
4. transporters who selected the site for the disposal or treatment of the hazardous substances they transported there.²⁵³

Liability under *CERCLA* is strict (without regard to fault), retrospective, joint and several.²⁵⁴ It is also subject to narrow defences.²⁵⁵ As a result, parties who placed or caused others to place hazardous substances at a site in the past, in a manner that was then lawful, may nonetheless be required to cleanup or pay for the cleanup of the site years or decades later. Similarly, parties whose only involvement with a site is that they currently own or lease the property, or conduct activities there, but who had no connection whatever with any hazardous substances on the site, also are liable for site cleanup.

A number of mine sites in the United States have become Superfund sites, and court decisions have defined "operator" expansively in order to impose *CERCLA* liability.²⁵⁶ Accordingly, commentators have expressed concern about the likely application of *CERCLA* to those who might volunteer to abate, remediate, or reclaim abandoned mine lands.²⁵⁷

RCRA addresses risks to human health and the environment posed by hazardous waste by authorizing establishment of a comprehensive regulatory framework for managing hazardous waste from generation to ultimate disposal and, in particular, governs the identification, generation, transportation, treatment, storage, and disposal of such materials.²⁵⁸ Although there are exemptions from the application of *RCRA* for many types of mining wastes, there is the potential for active management of non-excluded mining wastes in a voluntary abandoned mine cleanup to trigger application of the Act.²⁵⁹

Other provisions of *RCRA*, which allow civil actions against past or present owners or operators of facilities that "may present an imminent and substantial endangerment to health or the environment," also have raised concerns about their

²⁵³ *Ibid.*, § 9607(a) (West 2002).

²⁵⁴ *United States v. Chem-Dyne Corporation*, 572 F.Supp 802 (S.D. Ohio 1983).

²⁵⁵ 42 U.S.C.A. § 9607(b) (West 2002).

²⁵⁶ *Edward Hines Lumber Co. v. Vulcan Materials Co.*, 861 F.2d 155 (7th Cir. 1988).

²⁵⁷ *Supra* note 13.

²⁵⁸ 42 U.S.C.A. §§ 6901-6992k (West 2002).

²⁵⁹ *Supra* note 13.

application to voluntary abandoned mine land abatement, remediation, and reclamation activities.²⁶⁰

d. Bills Proposed in Congress

Over the last few years, a number of Bills have been introduced in the Congress of the United States addressing the abandoned mine land issue. In March 2002, a Bill was introduced in the U.S. House of Representatives entitled the *Abandoned Hardrock Mines Reclamation Act of 2002* (H.R. 4078).²⁶¹ The Bill would do a number of things including:

- establish a reclamation fee on hardrock mineral producers, based on a sliding scale used in the state of Nevada;²⁶²
- create a fund that these fees would be paid into, which would be used to help pay for cleanups of abandoned hardrock mines;²⁶³
- establish an abandoned mine reclamation "good samaritan" permit program, which would require permittees to specify reclamation plans and meet certain standards for cleanup, ensure public participation, and USEPA oversight of cleanups;²⁶⁴
- provide that only "orphan" sites, with no identifiable hardrock mine owners or operators, can be the subject of a reclamation permit;²⁶⁵
- waive potential CWA liability for reclamation permittees during cleanup, but not if the water quality is made worse by the permittee. Where water quality is made worse, CWA liability would re-apply;²⁶⁶
- require compliance with all other water quality and environmental laws; and²⁶⁷
- encourage states to complete an inventory of the abandoned hardrock mines within their states, and identify priority sites for cleanup, by providing money for such inventories and not allowing states to use money from the abandoned mine land fund for cleanups until such inventories are completed.

A similar, if less comprehensive, Bill was introduced in 1999 in the U.S. Senate, entitled the *Good Samaritan Abandoned or Inactive Mine Waste Remediation Act* (S. 1787).²⁶⁸ This Bill would amend the CWA to protect a remediating party from becoming legally responsible for any continuing discharges from the abandoned mine site after completion of a cleanup project. This exemption from CWA liability would apply so long

²⁶⁰ Ibid.

²⁶¹ H.R. 4078, 107th Cong., 2d Sess. (2002).

²⁶² Ibid., s. 102.

²⁶³ Ibid., s. 103.

²⁶⁴ Ibid., s. 201.

²⁶⁵ Ibid.

²⁶⁶ Ibid.

²⁶⁷ Ibid.

²⁶⁸ S. 1787, 106th Cong., 1st Sess. (1999).

as the remediating party, or "Good Samaritan," does not otherwise have liability for that abandoned or inactive mine site and implements a cleanup project approved by USEPA.

2. State

Because of different constitutional authority in the United States than applies in Canada, many state environmental laws are mini-versions of their federal law equivalents, and often are designed, if not required, to implement federal law, where so approved by the appropriate federal agency (e.g. USDOJ, USEPA). However, state law also may be more (but not less) stringent than federal law.

a. State Permit Blocking Law

An example of more stringent state law may be found in the state of Kentucky with respect to the issue of permit blocking. In April 2002, the USDOJ-OSMRE approved an amendment to Kentucky law designed to implement *SMCRA*, which would permit the state to block the issuance of a permit to either the applicant or any person who owns or controls the applicant who is currently in violation of applicable surface mining law.²⁶⁹ This requirement, as noted above, is more stringent than federal surface mining law. The state amendments also require the Kentucky Cabinet to afford a due process hearing to the applicant. In addition the state must conditionally issue a permit, permit renewal, or other authorization for surface coal mining and reclamation activity if it finds that a direct administrative or judicial appeal is presently being pursued in good faith to contest the validity of the determination of ownership and control. The state also must issue a permit if the applicant submits proof, including a settlement agreement, that the violation is being abated to the satisfaction of the issuing state or federal agency.

As noted above in the context of *SMCRA*, such permit blocking provisions may be of importance in the context of abandoned mines because they may prevent someone who otherwise may be in violation of state or federal law from obtaining a permit to "remine" an abandoned mine. They also may prevent someone from acting as a "volunteer" in the abatement, remediation, or reclamation of such sites.

b. State Good Samaritan Law

An example of state good samaritan legislation may be found in the Commonwealth of Pennsylvania. The state's *Environmental Good Samaritan Act*, which became law in 1999, is intended to encourage landowners and others to reclaim mineral extraction lands and abate water pollution caused by abandoned mines.²⁷⁰ The Act protects from state civil and environmental liability landowners, groups, and individuals who volunteer to undertake such projects. The Act is not intended to limit the liability of

²⁶⁹ *Supra* note 245. See Ky. Rev. Stat. 350.085(6) (2000).

²⁷⁰ Pa. Cons. Stat., tit. 27, c. 81, §§ 8101-8114 (1999).

a person who under existing law is, or may become, responsible for reclaiming the site or addressing water pollution arising from the site. The state's Department of Environmental Protection administers the Act, and reviews project proposals to determine their eligibility for acceptance under the program.

The Act addresses:

- who is eligible for protection under the Act (e.g. landowners who provide access to land without charge or compensation for reclamation and water pollution abatement projects; others who did not cause the pollution and are not ordered by state or federal agencies to do the work);
- types of land reclamation projects covered (e.g. those that restore abandoned or unreclaimed mineral extraction lands and that will improve water quality and not make water pollution worse);
- protections afforded (e.g. immunity from liability for water pollution and state citizen suit law);
- exceptions to immunity from liability (e.g. no immunity from liability for: recklessness, gross negligence, or willful misconduct that causes injury or damage; increased pollution by activities that are unrelated to the project; damage to adjacent or downstream landowners, where prior written and public notice of proposed project had not been provided).

To similar effect are 1995 amendments to California's *Water Code* with respect to drainage from abandoned mines. These amendments establish a program, including development of plans, that permit public agencies and cooperating private parties to reduce the threat to water quality caused by abandoned mine lands without becoming responsible for remediating abandoned mine waste to a level that meets all water quality objectives and related regulatory requirements.²⁷¹

C. Other Countries

1. United Kingdom

As a result of past environmental problems experienced with abandoned mines in the United Kingdom,²⁷² in 1995 the national government enacted amendments to its

²⁷¹ Cal. Water Code. §§ 13397-13398.9 (1995).

²⁷² United Nations Environment Programme, *Report of the International Round Table on Mining and the Environment* (Berlin: UNEP, 1999) at 40 (noting that acid drainage from abandoned mines in the United Kingdom have severely contaminated local streams).

environmental and water pollution legislation that establish an early warning or notice system regarding lands that have been, or are about to be, abandoned. The amendments, which address both contaminated lands and abandoned mines, impose obligations on mine operators to warn the national environmental agency of imminent abandonment of such facilities. The agency, in turn, must inform local authorities in whose area the abandoned land is located. The measures, which impose cleanup responsibilities on a variety of parties, provide specific exemptions for trustees, receivers, and receiver-managers.²⁷³

This statute is a further example that provides a precedent for expanding exemption or variance authority to other categories of parties, such as volunteers.

2. Australia

Australia also has had a long legacy of problems arising from abandoned mines,²⁷⁴ and there have been recent prosecutions of owners and occupiers of such lands for violating clean water laws.²⁷⁵ State legislation in Australia respecting regulation of coal mines defines "owner" broadly to include, in relation to an abandoned mine, the occupier of the land on which the abandoned mine is situated.²⁷⁶ Accordingly, this legislation is a further example of potential liability volunteers could face in attempting to abate, remediate, and reclaim such lands in the absence of appropriate protections.

V. KEY FINDINGS REGARDING REGULATORY AND INSTITUTIONAL BARRIERS, LIABILITY DISINCENTIVES, AND COLLABORATIVE OPPORTUNITIES IN CANADA

This Paper has reviewed federal, provincial, and state laws in Canada and the United States concerning abatement, remediation, and reclamation of abandoned mine lands. It also has briefly examined national law in the United Kingdom and state legislation in Australia. The matters focused on have included:

1. regulatory or institutional barriers;
2. liability disincentives; and
3. collaborative opportunities.

The following identifies key findings in Canada regarding these three matters.

²⁷³ *Environment Act 1995*, c. 25, Part II (contaminated lands and abandoned mines).

²⁷⁴ *Supra* note 272 (noting that large areas of dryland forest in Australia that were dug over in the goldrush of the 1860s have still not recovered). See also Environment News Service, "Australian Mines Ecological Time Bombs" (6 January 1999) (noting that old and abandoned mines are the biggest sources of acid mine drainage in Australia).

²⁷⁵ *Environment Protection Authority v. Norminco Ltd.*, [1996] N.S.W.E.C. 162.

²⁷⁶ *Coal Mines Regulation Act, 1982* New South Wales Cons. Acts., ss. 124, 146.

A. Regulatory and Institutional Barriers

Potential regulatory and institutional barriers under federal and provincial environmental and mining laws in Canada follow.

Federal

Federal **natural resource and environmental** laws in Canada contain the following characteristics that may constitute **regulatory and institutional barriers** to voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Licensing* requirements under natural resource management laws applicable to northern Canada that prohibit conditions in a licence from allowing deposits of wastes to certain waters that would violate regulations under these laws as well as under other federal laws such as the *Fisheries Act*;
- *Regulations* under certain federal environmental regulatory statutes such as the *Fisheries Act* that may apply in some circumstances to deposits of certain substances from metal mines, though there is some uncertainty about the nature and extent of their application to voluntary cleanups at abandoned mines given the wording of new regulations on metal mining effluents that go into effect in December 2002;
- Prospectively, regulations and/or *pollution prevention plans* under the *Canadian Environmental Protection Act, 1999* that could apply to releases of certain substances, such as arsenic, cadmium, and nickel, from voluntary cleanups at abandoned mine land areas;
- *Environmental assessment requirements* under the *Canadian Environmental Assessment Act* that could apply to such activities as a result of regulations under the Act that list provisions from other federal laws such as the *Fisheries Act* (e.g. authorization to alter fish habitat) that trigger a requirement to perform an environmental assessment. Prospectively, provisions from the new *Species at Risk Act* also could be listed under *CEAA Law List Regulations* and consequently also could trigger obligations to conduct an environmental assessment.

Provincial

Provincial **environmental** laws in Canada contain the following characteristics that may constitute **regulatory and institutional barriers** to voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Approval, licence, permit, plan, and regulation requirements* designed to prevent or minimize the discharge or release of contaminants into the environment that would have to be complied with as a condition precedent to being authorized to undertake such activities. These various requirements do not differentiate between new or active mining operations on the one hand, and abandoned mine land abatement, remediation, and reclamation activities on the other. Accordingly, these statutory and regulatory requirements would hold voluntary cleanups to the same standards of conduct, performance, and results as new or active mining operations.

Provincial **mining** laws in Canada contain the following characteristics that may constitute **regulatory and institutional barriers** to voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Statutory Focus on "Closed" rather than on Orphaned/Abandoned Mines* - mining law remediation and reclamation authority often focuses on "closed" mines where a viable owner remains responsible for the site, or for which satisfactory securities are assumed to exist. Provincial mining laws often fail to even define, let alone address, the "orphaned/abandoned" mine situation;
- *Narrow or inappropriate definitions of "abandoned" mines* - where provincial laws do define "abandoned" mines, some define them too narrowly or inappropriately to be of assistance to volunteers;
- *Inconsistent approach to abandoned mines where issue is addressed* - where mining laws address "abandoned" mines their provisions may either frustrate or encourage voluntary cleanups of such sites. However, statutory provisions of this type are so vague, general, or lack follow-through that they provide no true guidance to the would-be volunteer;
- *Requirements to obtain (1) licences and approvals and provide information before operations may commence at abandoned mines and plants and (2) consent before abandoning mines or plants* - provisions of this type found in at least one mining law may be considered both a potential barrier or a potential collaborative opportunity. They may constitute a barrier if the compliance expected is that of the ordinary new or existing mining operation. They may constitute a collaborative opportunity if they recognize, encourage, and protect the volunteer's special role in orphaned/abandoned mine cleanups;
- *Absence of specific statutory authority for encouraging voluntary initiatives* - may be considered a further barrier in that the lack of such a focus in mining legislation has contributed to a number of ad hoc

government abandoned mine cleanups paid for with public funds. While these are of great value, they detract from the need to focus on establishing a framework for responsible encouragement and protection of volunteers.

B. Liability Disincentives

Potential liability disincentives under federal and provincial environmental and mining laws in Canada follow.

Federal

Federal **natural resource and environmental** laws in Canada contain the following characteristics that may constitute **liability disincentives** to voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Quasi-criminal liability resulting in prosecution for violating prohibitions* in respect of licensing provisions or regulations under various natural resource management laws applicable to northern Canada;
- *Quasi-criminal liability resulting in prosecution for violating prohibitions* in respect of various provisions of the *Fisheries Act*, such as carrying out a work or undertaking that results in harmful alteration of fish habitat or the deposit of deleterious substances into water frequented by fish, and the regulations, if applicable;
- *Joint and several civil liability* to the Crown in Right of Canada or a province, as well as to fishermen for deposits of deleterious substances in waters frequented by fish contrary to the *Fisheries Act* that require cleanup or cause loss of income;
- Prospectively, *orders, remedial and other measures, and prohibitions* including those applicable to officers, directors, and agents of corporations in respect of violations of regulations and/or pollution prevention plans under *CEPA, 1999*; and
- *Ministerial orders, court injunctions, or both* in respect of violations of environmental assessment requirements under *CEAA*.

Provincial

Provincial **environmental** laws in Canada contain the following characteristics that may constitute **liability disincentives** to voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Quasi-criminal liability resulting in prosecution* for violating prohibitions, approvals, permits, licences, plans, and provisions of regulations under various provincial environmental laws;
- *Liability imposed by administrative order* on "responsible persons" to prevent, abate, remediate, or rehabilitate general environmental damage arising from owning, occupying or having charge, management, or control of a source of contaminant also may attach to volunteers;
- *Civil (and administrative) absolute, retroactive, joint and several liability* imposed by statute on responsible persons for contaminated sites also may attach to volunteers, subject to the protections and exemptions available under some provincial laws;
- *Civil liability* of responsible persons under environmental rights and spills statutory provisions as well as the common law for injunctive, monetary, or other relief may attach to volunteers. However, in practice the problem may be more theoretical than actual due to a variety of technical and financial obstacles to bringing such actions in the courts.

Provincial **mining** laws in Canada contain the following characteristics that may constitute **liability disincentives** to voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Quasi-criminal, civil, and administrative liability* for failing to comply with legislative and regulatory requirements pertaining to leases, licences, approvals, plans, and other instruments or entitlements provided under mining laws.

C. Collaborative Opportunities

Potential collaborative opportunities under federal and provincial environmental and mining laws in Canada follow.

Federal

Federal **environmental** laws in Canada contain precedents for the following **collaborative opportunities** in respect of voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Exempting from personal liability under environmental legislation* a trustee in bankruptcy, receiver, or interim-receiver if the harm

occurred before their appointment, or after the appointment, unless the damage occurred as a result of their gross negligence or willful misconduct;

- The above categories of persons provided with environmental liability protection under the *BIA* are probably too narrow to include those who voluntarily propose to undertake abandoned mine land abatement, remediation, and reclamation activities. However, the principle contained in this type of legislation could be considered under broader federal environmental law reforms.

Provincial

Provincial **environmental** laws in Canada contain precedents for the following **collaborative opportunities** in respect of voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Partial exemption from liability for historic mine site contamination* for those seeking to remine such sites as has recently been enacted in one province;
- *Variance authority* that acts as an "escape valve" from generally applicable environmental requirements such as approvals and regulations, is authorized by the laws of some provinces under certain circumstances and subject to certain obligations, such as consultation with those who may be directly affected by the proposed variance;
- *Exemptions for secured creditors* from being held as persons responsible for cleanup in certain circumstances are a potential precedent under several provincial laws that could be extended to abandoned mine land volunteers;
- *Orphan contaminated site rehabilitation agreements* are authorized in several provinces and constitute a precedent for a more sophisticated approach of this type for volunteers in the abandoned mine land context;
- *Limitations of liability* of responsible persons through a variety of apportionment, allocation, minor contributor, and other measures have been legislated under provincial environmental laws and constitute precedents for more equitable treatment of abandoned mine land volunteers;
- *Orphan site designations, contaminated site registries, and non-compliance reports* are precedents under provincial law and practice for the development of a comprehensive list or registry of "abandoned

mine land sites" and their status on a province-by-province basis that could assist those prioritizing collaborative voluntary cleanup of such sites.

Provincial **mining** laws, policies, and practices in Canada contain precedents for the following **collaborative opportunities** in respect of voluntary abandoned mine land abatement, remediation, and reclamation activities:

- *Variance authority* - of value for the same reasons set out under the discussion of environmental laws. However, the variance authority noted under several mining laws tended to be too narrow to apply to voluntary initiatives;
- *Ad hoc government abandoned mine cleanups* - although a potential barrier for the reasons set out above, also have been valuable in establishing cooperative efforts among government and non-government stakeholders in identifying sites, problems, and solutions.

VI. CONCLUSIONS AND RECOMMENDATIONS

Orphaned or abandoned mines for which the owner cannot be found, or for which the owner is financially unable to carry out clean-up, pose environmental, health, safety, and economic problems to communities, the mining industry, and governments in many countries including Canada. This paper has examined existing legislative requirements in Canada, selected other North American jurisdictions, and other countries on:

4. regulatory or institutional barriers;
5. liability disincentives, and
6. collaborative opportunities

regarding voluntary abatement, remediation, and reclamation of orphaned/abandoned mine lands. In addressing the above three matters, particular emphasis was placed on four approaches:

5. 'Good Samaritan' legislation;
6. Permit blocking;
7. Allocative versus joint and several responsibility; and
8. Non-compliance registries.

Part II of the paper provided a brief background to the orphaned/abandoned mines problem. The review noted that orphaned or abandoned mine sites are generally defined as closed mines whose ownership has reverted to the Crown, either because the owner has gone out of business, or because no owner can be found. They also are described as mine sites where the owner has ceased or indefinitely suspended advanced exploration, mining, or mine production without rehabilitating the site. The paper summarized the

impacts of such sites on the environment and the fact that no country appears to be immune from the problem. Finally, this part of the paper also noted that the problem requires both financial and legal solutions.

Part III reviewed existing legislative requirements in Canada, selected other North American jurisdictions, and other countries in regard to the above three matters. In general, there is no existing or proposed federal or provincial legislation in Canada regarding the subject of good samaritan legislation, though there may be some statutory developments that could be said to be analogous to, or precedents for, such legislation. Some existing law implicitly, though not explicitly, may have the same effect as permit blocking. Finally, there is some law, policy, and practice in existence regarding non-compliance registries and allocative versus joint and several liability. In comparison, there appear to be many more legislative measures in place or proposed at the federal and state level in the United States addressing explicitly several of these subjects. National legislation in the United Kingdom and state legislation in Australia is comparatively in its infancy in addressing these matters.

Part IV summarized key findings that arise in relation to each of the above three matters. Generally, in regard to regulatory or institutional barriers, federal and provincial environmental and mining laws in Canada contain a number of permit, regulation, and other requirements that likely would have to be complied with by those voluntarily undertaking abandoned mine land abatement, remediation, and reclamation. Existing exemption or variance authority under a number of these laws may be available to accommodate such activities, though the generality of the statutory language under many laws reviewed makes this difficult to predict with certainty. For a complete list of findings regard should be had to Part IV.A.

In regard to liability disincentives, federal and provincial law in Canada contains a variety of judge-made and statutory authorities that could impose quasi-criminal, civil, or administrative liability on those undertaking abandoned mine land abatement, remediation, and reclamation activities. There are some limited exceptions to this, such as potential exemptions from liability for historic mine site reclamation very recently enacted in one province. There also are some statutory authorities, such as secured creditor and related exemptions, that might serve as precedents for exempting from liability those who volunteer to abate, remediate, and reclaim abandoned mine lands. For a complete list of findings regard should be had to Part IV.B.

In regard to collaborative opportunities, a number of voluntary assessments and abandoned mine land cleanups have been completed, or are on-going, by provincial governments in Canada. These initiatives have been undertaken without legislative reform. Other collaborative opportunities include variance authority, precedents arising from secured creditor exemptions, and related approaches. For a complete list of findings regard should be had to Part IV.C.

Overall, however, the current legislative and regulatory regime in Canada is at best a patch-work, at worst indifferent to the problem. In most instances, legislators

simply have not turned their attention to orphaned/abandoned mines to produce a principled and comprehensive solution to the problem. Some current laws are broadly worded in terms of providing regulation-making authority that could be a basis for measures that could facilitate voluntary cleanups without requiring amendments to existing legislation. However, the better view may be that both the Parliament of Canada and provincial legislatures also will have to speak directly to the problem.

Based on the above review there are some precedents to be drawn from that provide a basis for recommendations that might be of assistance to the Task Group. These recommendations are premised on the view that either existing legislation will have to be amended one law at a time (as in an omnibus bill), or that a single stand-alone law will need to be enacted that has the same effect. Accordingly, the following is a short list of possible components or options (some stated in the alternative with the source noted) for a federal and provincial legislative/regulatory approach to facilitating voluntary abandoned mine land abatement, remediation, and reclamation:

- Amend existing or enact new law that encourages volunteers to abate, remediate, and reclaim abandoned mine lands by (1) setting out the protections afforded, (2) identifying who is eligible for protection under the Act, (3) identifying the types of projects covered, and (4) listing the exceptions to immunity from liability (Pennsylvania generally; Kentucky and USDOJ with regard to permit blocking);
- Exempt volunteers from being "responsible persons" under contaminated site, water pollution, or related laws as a result of carrying out "good samaritan" remediation if (1) prior to commencing the remediation, the volunteer was not a "responsible person" in respect of the site; and (2) environment (or environment and mining) ministry officers approve the work. The exemption would not apply to the extent the contamination or water pollution is caused or exacerbated by work carried out negligently, (or grossly negligently, or by willful misconduct) of the volunteer (recommended but only partially adopted in British Columbia; California);
- Establish (1) an abandoned mine reclamation "good samaritan" permit program, which would require permittees to specify reclamation plans and meet certain standards for cleanup, ensure public participation, and environment ministry oversight of cleanups; (2) provide that only "orphan" sites, with no identifiable responsible persons, can be the subject of a reclamation permit; (3) waive potential environmental liability for reclamation permittees during cleanup, but not if the water quality is made worse by the permittee. Where water quality is made worse, environmental liability would re-apply; (4) require compliance with all other water quality and environmental laws (US Congressional Bills);

- Require remining operators to implement strategies that control pollutant releases and ensure that pollutant discharges during remining activities are less than the pollutant levels released from the abandoned site prior to remining. Remining operators would have to develop a site-specific pollution abatement plan designed to reduce the pollution load from pre-existing discharges. The plan must incorporate the design and implementation of best management practices, based on environmental ministry guidance. Require operators to ensure that levels of certain specific substances (e.g. iron, manganese, and pH, etc.) in pre-existing discharges are not made worse from remining activities (USEPA under *Clean Water Act*);
- Create exemptions from remediation liability at "historic mine sites." A person would not be responsible for remediation at a historic mine site if: (1) indemnification has been provided to the person for that site under appropriate legislation; or (2) the person has acquired mineral or coal rights at the site for the purpose of undertaking mineral or coal exploration activities and the exploration activities have not exacerbated any contamination that existed at the time the person acquired these mineral or coal rights (British Columbia);
- Adoption of measures identified under Part IV.C above (from various federal/provincial jurisdictions in Canada).

Finally, these proposals should be considered in conjunction with other measures that are outside the scope of this report (e.g. abandoned mine land funds, more effective security deposits, etc.), but also appear to be integral to development of a comprehensive response to the abandoned mine land problem in Canada.