

# ENVIRONMENTAL REGULATION OF THE MINING INDUSTRY IN CANADA: AN UPDATE OF LEGAL AND REGULATORY REQUIREMENTS

By

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## I. INTRODUCTION

This report provides an update of environmental regulation of the mining industry in Canada. The report is based on an earlier review comparing environmental regulation of this industry in Canada and Chile.<sup>1</sup> The update builds on the earlier analysis of Canadian law and policy by identifying, describing, and evaluating existing and prospective environmental requirements in Canadian law at the federal and provincial levels relating to establishment, operation, and decommissioning of mining activities. Part II of the update describes the nature of environmental problems arising from mining activities, including identifying key mine types and phases, mining activities, and resulting environmental effects. Part III examines constitutional considerations in environmental regulation of mining activities. Part IV reviews common law and civil law protection of the environment from mining activities. Part V examines the applicable statutory regimes in place to protect the environment from mining activities including

<sup>1</sup> JOSEPH F. CASTRILLI, ENVIRONMENTAL CONTROL OF THE MINING INDUSTRY IN CANADA AND CHILE: A COMPARATIVE REVIEW OF LEGAL AND REGULATORY REQUIREMENTS (1997). The comparative review was prompted by the increased interest and activity of Canadian mining companies in investing in the establishment and expansion of mining operations in Chile under free trade arrangements and their declaration of intent to meet Canadian environmental standards while operating in Chile. *Id.* at 1, 58.

environmental planning and impact assessment laws, more traditional emission, discharge, and waste management control regimes under both environmental and mining statutes, as well as the role recognized for the public in protection of the environment and natural resources. Part VI considers emerging legislative and policy initiatives respecting environmental effects of mining activities. Part VII provides a brief concluding assessment and selected recommendations.

## II. ENVIRONMENTAL PROBLEMS FROM MINING ACTIVITIES IN CANADA

A proper understanding of potential environmental problems from mining activities must begin with an adequate understanding of the types and phases of mining operations as well as associated activities. These are briefly summarized below.

### A. Mine Types, Phases, and Activities

Mine types fall into three basic categories: (1) metal; (2) non-metal; and (3) energy-related. Metal mines include base metal,<sup>2</sup> uranium, iron ore, and gold mines.<sup>3</sup> Non-metal mines include salt, quartzite, and related industrial minerals.<sup>4</sup> Energy-related mines include surface and underground coal mines.<sup>5</sup>

There are essentially four phases to mining: (1) exploration; (2) mining and milling; (3) smelting and refining; and (4) mine closure.<sup>6</sup>

There are a variety of activities associated with each phase of mining.<sup>7</sup> The exploration phase of mining may include: (1) prospecting; (2) airborne and ground-based geochemical and geophysical surveys; (3) claim staking; (4) line cutting; (5) stripping; (6) drilling and trenching; (7) road/trail building and/or helicopter transport; and (8) bulk sampling.

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<sup>2</sup> Base metal mines may include: nickel, lead, copper, and zinc.

<sup>3</sup> Ontario and the federal government, for example, regulate metal mines for discharges to water under several provincial and federal laws. See *infra* part V.B.

<sup>4</sup> Ontario also regulates non-metal mines for discharges to water under several provincial environmental laws. See *infra* part V.B.

<sup>5</sup> ENVIRONMENT CANADA, THE STATE OF CANADA'S ENV'T, 11-53 (1996) [hereinafter STATE OF CANADA'S ENV'T].

<sup>6</sup> HOUSE OF COMMONS STANDING COMM. ON NATURAL RESOURCES, STREAMLINING ENVTL. REGULATION FOR MINING: FINAL REPORT 3 (1996) [hereinafter STREAMLINING ENVTL. REGULATION].

<sup>7</sup> The summary of activities associated with each phase of mining is based on the following documents. See *id.* See also ENVIRONMENTAL MINING COUNCIL OF B.C., ENVTL. CONSIDERATIONS FOR MINERAL DEVELOPMENT 1 (1996) [hereinafter B.C. MINING COUNCIL I]; and ENVIRONMENTAL MINING COUNCIL OF B.C., MORE PRECIOUS THAN GOLD 10 (1997) [hereinafter B.C. ENVTL. MINING COUNCIL II].

The mining and milling phase may include such activities as the following: (1) feasibility, engineering design and environmental impact assessment studies; (2) mine construction and pre-production; (3) stripping/storing of soil and vegetation overburden; (4) ore extraction; (5) crushing or grinding of ore; (6) flotation or chemical concentration of ore; (7) mine and surface water treatment; and (8) storage of waste rock and tailings.

The smelting and refining phase may include such activities as subjecting mineral concentrate to high heat or electro-chemical process to form ingots or bars of pure metal or alloy.

The mine closure phase may include such activities as: (1) recontouring of pit walls and waste dumps; (2) covering of reactive tailings dumps; (3) decommissioning of roads; (4) dismantling of buildings; (5) re-seeding/planting of disturbed areas; (6) ongoing monitoring; (7) possible treatment for water quality; (8) other mine reclamation activity; and (9) abandonment.

## **B. Environmental Effects**

Each phase of mining carries with it the potential for causing environmental impact.<sup>8</sup> In the exploration phase environmental effects may include: (1) land alienation from protection options; (2) camp garbage; (3) trail/road and trenching erosion; (4) disruption of habitat as well as harvesting and fishing activities; (5) noise pollution; and (6) acid mine drainage.

In the mining and milling phase environmental effects may include: (1) wildlife and fisheries habitat loss; (2) changes in local water balance; (3) increased erosion and sedimentation of lakes and streams; (4) containment of toxins in tailings ponds or leaching solutions; (5) tailings ponds or leaching pads stability failure; (6) potential acid generation from waste rock and pit walls; (7) heavy metal leaching from acid mine drainage; (8) cyanide solution containment at heap leach operations; (9) contamination of surface water and ground water from discharge of acid mine drainage including heavy metals originating in ore and tailings, and organic chemicals and cyanide originating from milling processes; (10) alienation of land as a result of waste rock piles and tailings disposal areas; and (11) noise and wind borne dust.

In the smelting and refining phase environmental effects may include: (1) heavy metals, organics, and sulphur dioxide emissions to air; (2) discharges of toxic chemicals, such as sulphuric acid and ammonia used during processing;

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<sup>8</sup> The description of environmental effects associated with each phase of mining activity is based on the following documents. See STREAMLINING ENVTL. REGULATION, *supra* note 6, at 3; B.C. ENVTL. MINING COUNCIL I, *supra* note 7, at 1; and B.C. ENVTL. MINING COUNCIL II, *supra* note 7, at 10.

(3) alienation of land as a result of the generation of slag; and (4) high energy consumption resulting in indirect environmental impacts.

In the mine closure phase environmental effects may include: (1) seepage of toxic contaminants, such as heavy metals, into surface and groundwater from acid mine drainage; (2) wildlife and fisheries habitat loss; (3) alienation of land; (4) revegetation failure; (5) wind borne dust; and (6) slope and tailings impoundment failure causing discharge of contaminants and sediments to water.

### **III. CONSTITUTIONAL ASPECTS OF ENVIRONMENTAL REGULATION OF MINING**

Constitutional authority over mining activity may be invoked by government in the capacity of owner of the resources to be mined as well as that of regulator. This part of the report sets out the constitutional basis for such legislative control over mining activities on public and private lands in Canada.

Canada is a federal state with powers divided between the federal and provincial levels of government under the Canadian Constitution. In Canada, the environment is too general a subject to be assigned by the Constitution exclusively to either the federal or provincial level of government.<sup>9</sup> It is an aggregate of matters that come within various classes of subjects, some of which are within federal jurisdiction, others of which come within provincial jurisdiction.<sup>10</sup> The Canadian Constitution can be said, therefore, to distribute the legislative basis for environmental regulation of mining activities between both levels of government.<sup>11</sup> The Constitution also provides the potential for protection of the individual from state action.<sup>12</sup> The extent to which this authority may protect the individual from environmental effects of mining activities, or restrict the right of government to enact and enforce legislation to protect the environment, is examined below.

#### **A. Division of Powers**

##### **1. Federal Powers**

Federal power to regulate mining activities arises from ownership of public property, such as federal lands,<sup>13</sup> and the authority to regulate pursuant to such

<sup>9</sup> *Friends of Oldman River Soc'y v. Can.*, [1992] 1 S.C.R. 3, 63-64, 70.

<sup>10</sup> PETER W. HOGG, *CONSTITUTIONAL LAW OF CANADA* 735 (4<sup>th</sup> ed. 1997).

<sup>11</sup> CAN. CONST. (Constitution Act, 1867), ss. 91-92.

<sup>12</sup> CAN. CONST. CHARTER OF RIGHTS AND FREEDOMS. (Constitution Act, 1982), pt. I, s. 7.

<sup>13</sup> CAN. CONST. (Constitution Act, 1867), s. 91(1A)(public debt and property).

general powers as the criminal law power,<sup>14</sup> and the peace, order, and good government clause.<sup>15</sup> Other federal heads of power provide a significant, if more focused, basis for legislative control of mining activities including the power to legislate with respect to seacoast and inland fisheries,<sup>16</sup> and in relation to works declared by the Parliament of Canada to be for the general advantage of Canada.<sup>17</sup> The constitutionality of several federal environmental and natural resource laws has been considered by the courts, including the Supreme Court of Canada. In general, the cases suggest that where federal environmental laws address matters of national concern or dimension,<sup>18</sup> stay within “criminal” penalty-type enforcement mechanisms,<sup>19</sup> or focus on protection or conservation of a resource specifically entrusted to the federal government (e.g. fisheries),<sup>20</sup> they may be upheld by the courts, and will not be seen as interfering with property, generally a provincial subject matter under the Constitution. The constitutionality of federal environmental impact assessment procedures have been upheld on the basis of all the relevant subject matters of section 91 of the

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<sup>14</sup> *Id.*, s. 91(27).

<sup>15</sup> *Id.*, preamble to s. 91.

<sup>16</sup> *Id.*, s. 91(12).

<sup>17</sup> *Id.*, s. 92(10)(c).

<sup>18</sup> See, e.g., *R. v. Crown Zellerbach Ltd.*, [1988] 1 S.C.R. 401 (federal regulation of marine pollution within provincial boundary waters upheld under predecessor statute to the Canadian Environmental Protection Act (“CEPA”) pursuant to national concern test of peace, order, and good government power because marine pollution pre-dominantly extra-provincial as well as international in character and clearly a matter of concern to Canada as a whole). For a federal law to be upheld under the national concern test pursuant to the peace, order, and good government clause, the government must show that the matter has a singleness, distinctiveness, and indivisibility that clearly distinguishes it from matters of provincial concern and a scale of impact on provincial jurisdiction that is reconcilable with the fundamental distribution of legislative powers under the constitution. In determining whether the matter has attained such characteristics it is relevant to consider what would be the effects on extra-provincial interests of a provincial failure to deal effectively with the control or regulation of the intra-provincial aspects of the matter. *Crown Zellerbach*, 1 S.C.R. at 431-432. See also *Re Can. Metal Co.* (1982), 144 D.L.R. (3d) 124 (Man. Q.B.) (air pollution from lead smelter satisfied national concern test).

<sup>19</sup> In order to qualify as valid federal legislation under the criminal law power, a statute must meet two requirements. First, it must have a valid criminal law object. Second, it must address that object by means of prohibitions accompanied by penal sanctions. See, e.g., *Re Canada Metal Co.* (1982), 144 D.L.R. (3d) 124 (Man. Q.B.) (upholding provisions of former Clean Air Act – now CEPA – under criminal law power). See also *RJR-MacDonald Inc. v. Can. (A.G.)*, [1995] 3 S.C.R. 199, 240; and *R. v. Hydro-Quebec*, [1997] 3 S.C.R. 288 (prohibitions under CEPA preventing entry into the environment of certain toxic substances, and interim orders issued under CEPA to control PCBs meet these two requirements for valid legislation under the criminal law power).

<sup>20</sup> The power to protect the environment of fish is not a general power to regulate water pollution. See, e.g., *Fowler v. The Queen*, [1980] 2 S.C.R. 213 (section 33(3) of Fisheries Act prohibiting logging and land clearing operations that may place debris in water frequented by fish, declared unconstitutional as provision did not link the prescribed conduct to actual or potential harm to fisheries). See also *Northwest Falling Contractors v. The Queen*, [1980] 2 S.C.R. 292 (section 33(2) of Fisheries Act prohibiting deposit of deleterious substances in water frequented by fish upheld as within federal fisheries power as it was based on a direct link between the prescribed activity and protection or conservation of fish).

Constitution.<sup>21</sup> The constitutionality of federal law regulating the uranium industry has been upheld by the courts on the basis of the declaratory power and the peace, order, and good government power.<sup>22</sup> As a result, prospecting for, mining, refining, and handling uranium may be regulated under federal law.<sup>23</sup>

## 2. Provincial Powers

Provincial power to regulate the environmental effects of mining activity arises from the authority to legislate with respect to the management of public lands belonging to the province,<sup>24</sup> property and civil rights in the province,<sup>25</sup> matters of a merely local or private nature in the province,<sup>26</sup> local works and undertakings in the province,<sup>27</sup> and non-renewable resources.<sup>28</sup> The constitutionality of several provincial environmental and natural resource laws also has been considered by the courts, including the Supreme Court of Canada. The courts have upheld broad provincial environmental legislation prohibiting the emission of contaminants into the natural environment on the basis of the provincial power over property and civil rights.<sup>29</sup> Provincial regulation of mining activities also has been upheld by the courts under the power to legislate in regard to local works and undertakings.<sup>30</sup> Provincial laws may have greater difficulties being upheld, however, where they purport to regulate the activities of federally regulated businesses, particularly those declared by the Parliament of Canada to be for the general advantage of Canada,<sup>31</sup> or where they attempt to legislate with regard to interprovincial pollution problems.<sup>32</sup>

<sup>21</sup> *Friends of Oldman River Soc'y v. Can.*, [1992] 1 S.C.R. 3, 73 (federal government authorized to impose environmental assessment requirement on provincial government hydroelectric project where project had an effect on various areas of federal responsibility such as navigable waters, fisheries, and Indians and Indian lands).

<sup>22</sup> *Ont. Hydro v. Ont.*, [1993] 3 S.C.R. 327 (upholding the Atomic Energy Control Act).

<sup>23</sup> HOGG, *supra* note 10, at \_\_\_.

<sup>24</sup> CAN. CONST. (Constitution Act, 1867), s. 92(5).

<sup>25</sup> *Id.*, s. 92(13).

<sup>26</sup> *Id.*, s. 92(16).

<sup>27</sup> *Id.*, s. 92(10)(a).

<sup>28</sup> *Id.*, s. 92A. Each province may make laws in relation to exploration for non-renewable natural resources, and the development, conservation and management of non-renewable natural resources, including laws in relation to the rate of primary production therefrom, as well as taxation of such resources. Production from a non-renewable natural resource is primary production therefrom if it is in the form in which it exists upon its recovery or severance from its natural state, or it is a product resulting from processing or refining the resource. *Id.*

<sup>29</sup> *R. v. Lake Ont. Cement Ltd.* (1973), 2 O.R. 247 (Ont. H.C.).

<sup>30</sup> *Re Nat'l Energy Bd. Act*, [1988] 2 F.C. 196 (F.C.A.).

<sup>31</sup> *R. v. Eldorado Nuclear Ltd.*, (1981), 34 O.R. (2d) 243 (Ont. Div. Ct.) (federal Crown corporation that discharged radioactive material from its uranium reprocessing facility into one of the Great Lakes could not be convicted of water pollution under Ontario environmental protection legislation).

<sup>32</sup> *Interprovincial Cooperatives Ltd. and Dryden Chemicals Ltd. v. The Queen*, [1976] 1 S.C.R. 477 (legislation in one province that is otherwise constitutionally valid, cannot be applied to activities in an adjoining province that contaminate the rivers of the first province. Thus Manitoba

## B. Charter of Rights and Freedoms

The Charter of Rights and Freedoms entrenches certain fundamental liberties in the Canadian Constitution by limiting the right of government to interfere with those liberties,<sup>33</sup> except to the extent that government can show that such interference is demonstrably justified.<sup>34</sup> The courts have not been willing to invoke the Charter as a basis for protecting property owners who argue that state action in approving development activities diminish their use and enjoyment of property or their local environment.<sup>35</sup> The Supreme Court of Canada, however, has upheld from Charter challenge broad and general pollution prohibitions frequently contained in provincial environmental legislation, finding such generally worded laws to be justified in pursuing the public policy objective of environmental protection.<sup>36</sup>

## IV. COMMON LAW AND CIVIL LAW PROTECTION OF THE ENVIRONMENT FROM MINING ACTIVITIES

Canada is both a common law and civil law jurisdiction. This part summarizes the development of judge-made law and principles that can be invoked by individuals to protect the environment from mining activities, in the absence of, or in conjunction with, regulatory or administrative action.

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legislation that purported to remove barriers to fishermen suing for compensation arising from mercury pollution originating in Ontario and Saskatchewan was declared invalid by the Supreme Court of Canada on the grounds that the victim province could not pass laws governing activities in a different province).

<sup>33</sup> CAN. CONST. CHARTER OF RIGHTS AND FREEDOMS. (Constitution Act, 1982). pt. 1, s. 7 (everyone has the right to life, liberty, and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice).

<sup>34</sup> *Id.*, s. 1 (Charter of Rights and Freedoms guarantees the rights and freedoms set out in it subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society).

<sup>35</sup> *Manicom v. County of Oxford* (1985), 21 D.L.R. (4<sup>th</sup>) 611 (Ont. H.C.J.) (section 7 of Charter did not protect property owners who argued against provincial cabinet approval of waste disposal site).

<sup>36</sup> *R. v. Can. Pac. Ltd.* (1995), 17 C.E.L.R. (N.S.) 129 (S.C.C.) (section 13(1)(a) [now section 14(1)(a) of Ontario Environmental Protection Act prohibiting discharges into natural environment that may cause an adverse effect not unconstitutionally vague under section 7 of Charter). Legislatures are justified in choosing broad language in order to pursue the public policy objective of environmental protection. Environmental laws in other provinces, and at the federal level, contain similarly broad pollution prohibitions. A finding of unconstitutionality of the Ontario statute would place the prohibitions in these other environmental laws in constitutional jeopardy and impede the ability of the legislature to provide for environmental protection, and constitute a significant social policy setback. *Can. Pac. Ltd.* 17 C.E.L.R. (N.S.) 162-163.

## A. The Common Law Regime in Canada

In the nine common law provinces in Canada, there are a variety of common law causes of action available to individuals seeking redress from environmental damage or injury caused by activities such as mining operations. The causes of action include: (1) negligence; (2) trespass; (3) private nuisance; (4) riparian rights; (5) strict liability; and (6) public nuisance. A wide array of remedies may be available including monetary damages, injunctions, and declarations. However, there are a number of defences available to these actions<sup>37</sup> and provincial mining legislation sometimes has supplemented, if not superceded, common law rights of redress.<sup>38</sup>

### 1. Common Law Causes of Action

Each of the causes of action discussed below have potential application in varying degrees to each phase of mining from exploration, mining and milling, smelting and refining, to mine closure, and the associated mining activities for each phase.

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: (1) the plaintiff is within a class of persons to whom the defendant owed a duty of care; (2) the defendant's conduct fell below the standard required of a reasonable person engaged in the particular activity; (3) 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.<sup>39</sup> 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.<sup>40</sup> Recently, fear of future lawsuits have prompted Ontario

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<sup>37</sup> The defences include: (1) standing to sue; (2) statutory authority; (3) prescription; and (4) acquiescence. These defences are discussed *infra* part IV.A.2.

<sup>38</sup> See, e.g., Mining Act, R.S.O. 1990, c. M.14, s. 175 (easement authorized to dump tailings on lands of any person subject only to right of compensation). Discussed *infra* part IV.A.3.

<sup>39</sup> William Charles & David VanderZwaag, *Common Law and Environmental Protection: Legal Realities and Judicial Challenges*, in ENVIRONMENTAL LAW AND POLICY 80 (Elaine L. Hughes et al. eds., 2<sup>nd</sup> ed. 1998).

<sup>40</sup> *Just v. B.C.*, [1989] 2 S.C.R. 1228 (while a public authority is not liable where conduct that results in harm is the result of a policy decision, liability in negligence may result if the conduct that results in harm arises from the operation of the policy, such as an inadequate system of inspection implemented pursuant to the policy). See also *Talbot v. Northwest Territories (Commissioner)*, No. CV 06858, (N.W.T.S.C. Nov. 21, 1997) (QUICKLAW) (negligence claim dismissed where plaintiff failed to demonstrate that government defendants owed plaintiff duty of care or that plaintiff suffered loss or injury arising from arsenic emissions from mining operation).

environment ministry officials to develop defences to claims of regulatory negligence.<sup>41</sup>

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.<sup>42</sup> To deposit a foreign substance such as water, garbage, or other waste on the property of another, and in doing so disturb his or her possession of property, however slight the disturbance, constitutes trespass, regardless of whether the substance is toxic or non-toxic.<sup>43</sup>

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, nor on interference with exclusive possession. The essence of private nuisance, which may be either physical damage or disturbance of occupation, is an interference with an owner's or occupier's interest in the beneficial use of his or her land. The reasonableness of the interference depends upon the degree of impact that it has on a neighbour's enjoyment of his or her property, not on how useful, necessary, or diligent is the offending activity.<sup>44</sup>

Riparian rights refers to rights 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's land.<sup>45</sup>

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

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<sup>41</sup> Martin Mittelstaedt, *Ontario prepares negligence defence; environment officials fear lawsuits*, Globe and Mail (Toronto), Feb. 18, 1997, at A1, A11. See also *Gauvin v. Ontario (Ministry of the Environment)* (1995), 22 C.E.L.R. (N.S.) 277 (Ont. Ct. – Gen. Div.), *aff'd* (1997)(Ont. C.A.) (inadequate operational implementation of septic tank inspection policy under provincial environmental statute attracting liability in negligence).

<sup>42</sup> *Kerr v. Revelstoke Building Materials Ltd.* (1976), 71 D.L.R. (3d) 134, [1976] W.W.D. 139 (Alta. S.C.T.D.) (physical invasion of motel business by smoke, sawdust and fly ash from nearby lumber operation).

<sup>43</sup> *Friesen v. Forest Products Ltd.*, (1978) 22 N.B.R. (2d) 146 (N.B.S.C.Q.B.D.) (pesticide spray drift).

<sup>44</sup> *Schenck v. Her Majesty the Queen in Right of Ont.* (1981), 34 O.R. (2d) 595 (Ont. H.C.) (salt applied to highway by provincial agency causing damage to fruit farm). See also *Steadman v. Erickson Gold Mining Corp.* (1987), 2 C.E.L.R. (N.S.) 127 (B.C.S.C.), (1989), 35 B.C.L.R. (2d) 130 (B.C.C.A.) (silt contamination of plaintiff's surface water and groundwater arising from construction of road by mining company on land adjacent to plaintiff's land constituting private nuisance).

<sup>45</sup> *Gauthier v. Nanef*, [1971] 1 O.R. 97 (Ont. H.C.J.).

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.<sup>46</sup>

Public nuisance is an unreasonable interference with a right common to all members of the general public. However, a private citizen may only bring an action in public nuisance upon suffering a harm different from the harm suffered by the general public. 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 may sue in public nuisance to vindicate the right.<sup>47</sup> 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 as a result 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.<sup>48</sup>

## 2. Defences

Defences to one or more of the common law causes of action that may be employed in the context of environmental impacts from mining activities include: (1) standing to sue; (2) statutory authority; (3) prescription; (4) acquiescence; (5) act of God; (6) deliberate act of a third person; and (7) default of the plaintiff. These defences are briefly described below.

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 general public, only the Attorney-General may sue in public nuisance to vindicate the right.<sup>49</sup>

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 or with other regulatory requirements, then these entities may not be liable for harm caused to private persons. A legislature can specifically authorize a tort (e.g. negligence, nuisance, etc.) and can also

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<sup>46</sup> Rylands v. Fletcher (1868), L.R. 3 H.L. 330 (H.L.) (flooding of mining works by reservoir).

<sup>47</sup> Hickey v. Elec. Reduction Co. of Can. Ltd. (1971), 21 D.L.R. (3d) 368 (Nfld. S.C.).

<sup>48</sup> Environmental Bill of Rights, S.O. 1993, c. 28, s. 103. See also Joseph F. Castrilli, *Environmental Rights Statutes in the United States and Canada: Comparing the Michigan and Ontario Experiences*, 9 VILL. ENVTL. L.J. 349, 432-433 (1998) (noting lack of experience with new EBR public nuisance provision in the courts through 1996).

<sup>49</sup> Hickey 21 D.L.R. at 369. See also Saskatchewan (Environment and Public Safety) v. Hunter, No. 1082 of 1994 (Sask. Q.B. Aug. 12, 1994) (QUICKLAW) (public nuisance action dismissed where plaintiff failed to show special damage peculiar to him arising from mining practices of uranium mining and processing company).

provide for compensation for harm caused. Normally, however, the legislature is silent on such authorization or compensation issues. In these situations, the courts have had to interpret the statutory purposes and context and have only allowed the defence of statutory authority to succeed if: (1) the defendant has specific statutory authority to proceed with the activity; (2) the statute under which the defendant acted expressly or impliedly authorized the tort; and/or (3) the tort was the inevitable consequence of what the statute authorized and contemplated.<sup>50</sup> Canadian 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.<sup>51</sup>

Prescription refers to the right to pollute a neighbour’s lands that is acquired by one who has caused a private nuisance continuously for twenty 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.<sup>52</sup> However, prescription is not a defence to an action in public nuisance.

Acquiescence refers to conduct by a plaintiff in expressly consenting or actively encouraging the offending activity of a 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.<sup>53</sup>

Other defences such as acts of God,<sup>54</sup> deliberate acts of third persons,<sup>55</sup> or a plaintiff’s consent to, or default in connection with, the conduct of a defendant<sup>56</sup> may be available to defendants in certain rare and limited circumstances.

### **3. Mining Legislation Limitations on Common Law Rights of Redress**

The 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 can have the effect of limiting persons harmed to monetary compensation, as opposed to an injunction, for any

<sup>50</sup> See, e.g., *Tock v. St. John’s Metropolitan Area Board*, [1989] 2 S.C.R. 1181; and *Stephens v. Village of Richmond Hill*, [1956] O.R. 88 (Ont. C.A.).

<sup>51</sup> See, e.g., *City of Portage La Prairie v. B.C. Pea Growers Ltd.*, [1966] S.C.R. 150 (statutory authorization for negligent activity by municipality no defence to action brought in private nuisance).

<sup>52</sup> *Schenck* 34 O.R. 608.

<sup>53</sup> ALLEN M. LINDEN, *CANADIAN TORT LAW* 516 (4<sup>TH</sup> ED. 1988).

<sup>54</sup> *Id.* at 486-487 (“act of God” refers to an unforeseeable and unavoidable natural phenomenon such as a flood, tornado, or earthquake).

<sup>55</sup> *Id.* at 518 (act of a third person refers to an act of sabotage or related action by a person outside the control of the defendant).

<sup>56</sup> *Id.* at 517 (an example would be contributory negligence by plaintiff).

damage caused by such activities. In Ontario, for example, the owner of a mine or mill may obtain an order from the Mining Commissioner of Ontario following a hearing to: (1) open, construct, and use ditches, tunnels, flumes, or other conduits on any land for the drainage or conveyance of water; (2) discharge water on any land through drainage or other means; (3) drain, divert, or lower the water of any lake, stream, river, pond, or watercourse, whether or not the water is on the land of another person or that other person may have rights in the water; (4) dam water even though it may overflow other land; (5) obtain rights of way over any lands for the construction of roads or transmission of electricity; (6) enter upon and use in connection with the working of his or her mine a specified area of other land; and (7) deposit tailings, slimes, or other waste products upon land, or discharge such materials into any water, so long as the effects of such deposit or discharge are not injurious to life or health.<sup>57</sup> Where such rights or easements are granted to mining companies, the Mining Commissioner must order reasonable compensation to the person whose land has been or will be effected by the mining activities.<sup>58</sup>

## B. The Civil Law Regime in Canada

The province of Quebec is a civil law jurisdiction. This part reviews relevant provisions of the Quebec Civil Code that may have relevance to redress of environmental damage from mining activities.

Civil law concepts of “abuse of rights” are analogous to those found in the common law regarding potential or actual environmental damage between private parties. However, the civil law does not recognize the difference between private and public nuisance.<sup>59</sup> Several obligations created by the new Civil Code of Quebec<sup>60</sup> can play a significant role in environmental protection. For example, under Article 1457 “every person has a duty to abide by the rules of conduct which lie upon him...so as not to cause injury to another.”<sup>61</sup> Where such person is “endowed with reason and fails in this duty, he is responsible for any injury he causes to another person and is liable to reparation for the injury...”<sup>62</sup> Such person is also liable for “injury caused to another by the act or fault of another person or by the act of things in his custody.”<sup>63</sup> This provision and a related one<sup>64</sup>

<sup>57</sup> Mining Act, R.S.O. 1990, c. M.14, s. 175(1)(a)-(i), as am. The Mining Commissioner may, however, rely on other legislation to prevent dumping of waste from mining activity. See, e.g., 611428 Ontario Ltd. v. Metropolitan Toronto and Region Conservation Authority, File no. 123/94 (Ont. Div. Ct. Apr. 22, 1996) (QUICKLAW) (mining commissioner may rely on conservation authorities legislation authorizing ecosystem conservation to prevent dumping of fill).

<sup>58</sup> *Id.* s. 175 (2)(3).

<sup>59</sup> Lorne Giroux, *Environmental Law in Quebec*, in ENVIRONMENTAL LAW AND POLICY 124 (Elaine L. Hughes et al. eds., 2<sup>nd</sup> ed. 1998).

<sup>60</sup> Civil Code of Quebec, S.Q. 1991, c. 64.

<sup>61</sup> *Id.*, art.1457.

<sup>62</sup> *Id.*

<sup>63</sup> *Id.*

are new under the Civil Code of Quebec, which has only recently come into force.<sup>65</sup> However, they are the successors to provisions under the former Civil Code of Lower Canada<sup>66</sup> that had long been applied by the Quebec courts to redress environmental harm,<sup>67</sup> including harm arising from mining activities.<sup>68</sup> These provisions rely on fault as a requirement, which is a mixture of concepts of intent, negligence, and balance of harm, though in certain environmental cases the Quebec courts have presumed fault.<sup>69</sup> Other provisions in the new Civil Code of Quebec may make it easier in future for the Quebec courts to find environmental liability without proof or presumption of fault.<sup>70</sup> The Civil Code of Quebec also recognizes concepts of riparian rights and obligations.<sup>71</sup>

Defences to civil law theories of liability, such as governmental authority for defendant's conduct, have traditionally succeeded only if the permitted activity occurs in a manner that does not exceed the normal measure of inconvenience that should be acceptable in the circumstances. Commentators have suggested that specific environmental approvals, especially those setting allowable emission or effluent limits, may be a more difficult defence for the Quebec courts to reject in future.<sup>72</sup>

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<sup>64</sup> *Id.*, art. 1462. Article 1462 states that: "No person is liable for injury caused to another by an act or omission of a person not endowed with reason except in the cases where the conduct of the person not endowed with reason would otherwise have been considered wrongful."

<sup>65</sup> The Civil Code of Quebec came into force in 1994.

<sup>66</sup> Civil Code of Lower Canada, S.Q. 1980, c. 39, art. 1053. Article 1053 stated that: "Every person capable of discerning right from wrong is responsible for the damage caused by his fault to another, whether by positive act, imprudence, neglect, or want of skill."

<sup>67</sup> Giroux, *supra* note 59, at 124-130. Remedies for breach of these obligations include damages and injunctive relief. *Id.* at 124.

<sup>68</sup> See, e.g., Lachance v. Carey Canadian Mines, [1982] R.L. 362 (air pollution).

<sup>69</sup> Canadian Paper Co. v. Brown (1922), 63 S.C.R. 243 (fumes and odours from defendant's sulphate paper plant causing occupant of neighbouring property intolerable inconvenience and loss of habitability sufficient to find fault pursuant to Article 1053).

<sup>70</sup> Civil Code of Quebec, S.Q. 1991, c. 64, art. 7 (no right may be exercised with the intent of injuring another or in an excessive and unreasonable manner which is contrary to the requirements of good faith), art. 976 (neighbours shall suffer the normal neighbourhood annoyances that are not beyond the limit of tolerance they owe each other, according to the nature or location of their land or local custom). Article 976 is a special rule on the ownership of immovables.

<sup>71</sup> Civil Code of Quebec, S.Q. 1991, c. 64, art. 979 (owner of higher land has no right to aggravate the condition of lower land regarding natural water flows), art. 981 (riparian owner may, for his needs, make use of a lake, the headwaters of a watercourse, or any other watercourse bordering or crossing his land, and as the water leaves his land, he shall direct it, not substantially changed in quality or quantity, into its regular course), art. 982 (unless it is contrary to the general interest, a person having a right to use a spring, lake, sheet of water, underground stream, or any running water may, to prevent the water from being polluted or used up, require the destruction or modification of any works by which the water is being polluted or dried up).

<sup>72</sup> Giroux, *supra* note 59, at 131.

## **V. STATUTORY REGIMES APPLICABLE TO PROTECTION OF THE ENVIRONMENT FROM MINING ACTIVITIES IN CANADA**

This part focuses on three types of legislation respecting environmental protection from mining activities in Canada: (1) environmental planning and impact assessment legislation; (2) regulatory legislation controlling emissions and discharges of contaminants to the environment, as well as management of mining activities, such as exploration and reclamation; and (3) the role of the public in administrative and judicial processes relating to protection of the environment.

### **A. Environmental Planning and Impact Assessment Regimes**

Over the past three decades, federal and provincial governments in Canada have enacted environmental impact assessment legislation as a supplement to more traditional regulatory legislation controlling emissions and discharges from industrial operations, including mining activities. The following briefly reviews these programs.

#### **1. Overview**

Environmental impact assessment is a planning tool that requires early identification and evaluation of all potential environmental consequences of a proposed development undertaking and its alternatives, combined with a decision making process that attempts to reconcile any approval of the proposed development with environmental protection and preservation.<sup>73</sup> The development of environmental impact assessment requirements at the federal and provincial levels of government in Canada has been an evolutionary process over the past three decades. There are several factors that distinguish environmental assessment at the federal level from the way it has developed in certain provinces in Canada. The federal process has been characterized since its inception by three principle qualities: (1) self-assessment by the proponent of the activity; (2) public hearings that are more like public meetings held by expert panels appointed to make recommendations, not decisions, on the proposal with few legal entitlements for members of the public to test the proponent's environmental information; and (3) the ability of the proponent to proceed with the undertaking even in the face of adverse recommendations made by expert panels.<sup>74</sup> Litigation in connection with the federal regime before the federal courts has focused on questions of whether the environmental assessment

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<sup>73</sup> *Friends of Oldman River Soc'y v. Can.*, [1992] 1 S.C.R. 3, 71.

<sup>74</sup> These characterizations apply to all three versions of federal environmental assessment procedures that have been in existence at various times since the early 1970s. See *infra* part V.A.2.a-c.

process was a legally binding requirement on federal departments, and if so whether a particular project should be subject to the process.<sup>75</sup> In contrast, at the provincial level in jurisdictions such as Ontario, the environmental assessment process has been marked by specific, legally binding environmental assessment approvals issued by an administrative tribunal with decision-making authority following quasi-judicial hearings in which there has been full public involvement.<sup>76</sup> With some exceptions,<sup>77</sup> litigation in connection with the Ontario process has not been in the courts, but rather has been primarily before the administrative tribunal dealing with the substantive environmental merits of the proposal itself and whether it should be approved. In the past, therefore, the federal and Ontario regimes have been the polar opposites of each other. However, recent changes to Ontario's law, discussed below, may change this picture in future.<sup>78</sup> The following examines key features of both the theory and practice of environmental assessment law at both levels of government.

## 2. Federal

Federal environmental assessment in Canada may be said to fall into four historical periods: (1) 1973 to 1984; (2) 1984 to 1994; (3) 1995 to date; and (4) 1998 to date. These periods correspond with the different procedural regimes that have been in place in each of these periods. The first period corresponds with the establishment of the Environmental Assessment and Review Process ("EARP"),<sup>79</sup> a regime with no legally binding effect. The second period corresponds with that of the EARP Guidelines Order ("EARPGO"),<sup>80</sup> a regime initially believed by the federal government to have no legally binding effect, but one which the federal courts and the Supreme Court of Canada eventually held was legally binding on federal departments. The third period corresponds to the enactment by the Parliament of Canada of the Canadian Environmental Assessment Act ("CEAA"),<sup>81</sup> a statute which, despite its status as law, in many respects retains the essential characteristics of the earlier regimes, and may well be less comprehensive in its coverage of federal activities than EARPGO. The basic characteristics of the federal environmental assessment process including self assessment by the proponent department, and recommendations, not decisions, by expert review panels that may be ignored by the proponent and responsible authority, have remained the same, therefore, regardless of which of

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<sup>75</sup> See *infra* part V.A.2.b.c.

<sup>76</sup> See *infra* part V.A.3.a.

<sup>77</sup> See, e.g., *Re Temagami Wilderness Soc'y*, No. 597/88, at 1-2 (Ont. Div. Ct. Apr. 11, 1989) (exemption of timber management activity from environmental assessment hearing valid).

<sup>78</sup> See *infra* part V.A.3.a.

<sup>79</sup> GOV'T OF CAN., FEDERAL CABINET POL'Y ON THE ENVTL. ASSESSMENT AND REVIEW PROCESS (1973) [hereinafter EARP].

<sup>80</sup> *Envtl. Assessment and Review Process Guidelines Order*, SOR/84-467 (1984) [hereinafter EARPGO].

<sup>81</sup> Canadian Environmental Assessment Act, R.S.C. 1985, c. C-15.2 [hereinafter CEAA].

first three environmental assessment regimes have been in place. The fourth period corresponds to the very recent development of geographically specific federal environmental assessment legislation that may exclude the application of CEAA in the particular geographic area, but which contains many of the same structural or framework concerns of CEAA and its predecessor regimes.

### **a. Environmental Assessment and Review Process**

Inspired by the development in the late 1960s-early 1970s of legislative requirements in the United States that imposed on federal agencies the obligation to prepare environmental impact statements for all federal actions significantly affecting the quality of the human environment,<sup>82</sup> Canada developed its own environmental assessment procedures. The period from the early 1970s to the mid 1980s constituted the period when the federal government determined by cabinet policy that the environmental effects of proposed projects initiated by a federal department or agency, for which federal funds were solicited, or for which federal property was required, would be subject to the EARP regime “before commitments or irreversible decisions” were made.<sup>83</sup> Proprietary Crown corporations and federal regulatory agencies were invited, but not required, to participate.<sup>84</sup> Public hearings, which were in practice more analogous to public meetings, before expert panels were also authorized when appropriate. The EARP regime of this period constituted voluntary self-assessment by proponent departments, who determined if they would subject themselves to the process,

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<sup>82</sup> National Environmental Policy Act, 42 U.S.C.A., §§ 4321, 4331-4335 (West 1998) [hereinafter NEPA]. NEPA requires that “to the fullest extent possible...all agencies of the federal government shall...include in every recommendation or report on proposals for...major federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on: (i) the environmental impact of the proposed action; (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented; (iii) alternatives to the proposed action; (iv) the relationship between local short-term uses of man” environment and the maintenance and enhancement of long-term productivity; and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.” *Id.*, § 4332(2)(c). The Supreme Court of the United States has held that the requirements of NEPA are procedural not substantive, in the sense that the statute requires a fully informed and well-considered decision by the decision making agency, not necessarily a decision the court would have reached. *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council*, 435 U.S. 519 (1978). In effect, this decision means that once the agency has met the procedural requirements of NEPA in terms of producing an environmental impact statement (“EIS”) that meets the content requirements of § 4332(2)(c), the agency is free to make any decision it wants on the merits of the proposed action, regardless of what the EIS shows to be the potential environmental consequences of such action. The Supreme Court of the United States also subsequently held that: (1) NEPA does not require that action be taken by agencies to mitigate the adverse effects of major federal actions; and (2) NEPA does not require agencies to include in every EIS a detailed explanation of specific measures that will be employed to mitigate the adverse impacts of a proposed action. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989).

<sup>83</sup> EARP, *supra* note 79, at 1.

<sup>84</sup> *Id.*

whether environmental effects were significant, and whether to proceed with their projects, irrespective of any recommendations by expert review panels.

**b. Environmental Assessment and Review Process Guidelines Order**

As a result of perceived gaps in the EARP regime, the federal government revised the process in 1984, creating EARPGO, by regulation pursuant to the Department of Environment Act.<sup>85</sup> The purpose of EARPGO was to require all federal departments and agencies that may have a decision-making authority for any proposal, that is, any initiative, undertaking, or activity that may have an environmental effect on an area of federal responsibility, to initially screen such proposal to determine whether it may give rise to any potentially adverse environmental effects. If a proposal could have a significant adverse effect on the environment, provision was made for public review by an environmental assessment panel whose members must be unbiased, free of political influence, and possessed of special knowledge and experience relevant to the technical, environmental, and social effects of the proposal.<sup>86</sup> The process was still based on the principle of self assessment<sup>87</sup> and the federal government continued to regard EARPGO as it had EARP; a set of advisory guidelines only.<sup>88</sup> However, beginning in 1989,<sup>89</sup> and culminating with a 1992 decision of the Supreme Court of Canada,<sup>90</sup> the courts interpreted EARPGO as mandatory in nature and capable of conferring enforceable rights. These court decisions had the effect of overruling federal government decisions not to apply EARPGO to proposals that had been subject only to provincial environmental assessments.<sup>91</sup> Other federal court decisions compelled federal departments to apply EARPGO to on-going federal proposals in compliance with EARPGO requirements.<sup>92</sup> These and other

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<sup>85</sup> Department of the Environment Act, R.S.C. 1985, c. E-10, s. 6.

<sup>86</sup> *Friends of the Oldman River Soc'y v. Can.*, [1992] 1 S.C.R. 3.

<sup>87</sup> EARPGO, SOR/84-467, s. 3 (1984).

<sup>88</sup> Ted Schrecker, *The Canadian Environmental Assessment Act: Tremulous Step Forward, or Retreat Into Smoke and Mirrors?*, 5 C.E.L.R. (N.S.) 192, 194-195 (1991) (noting that federal officials had been treating EARPGO as a set of non-binding administrative guidelines).

<sup>89</sup> See, e.g., *Canadian Wildlife Fed'n Inc. v. Can. (Minister of the Env't)*, (1989), 3 C.E.L.R. (N.S.) 287 (F.C.T.D.); *aff'd* 4 C.E.L.R. (N.S.) 1 (F.C.A.) (EARPGO, as an enactment or regulation and not a mere description of policy or program, is mandatory and may create enforceable rights).

<sup>90</sup> *Friends of the Oldman River Soc'y v. Can.*, [1992] 1 S.C.R. 3 (Department of the Environment Act capable of supporting power to enact binding subordinate legislation and nothing in statute or EARPGO indicates that the latter is merely another form of administrative directive that cannot confer enforceable rights).

<sup>91</sup> In both *Canadian Wildlife Fed'n* and *Friends of the Oldman River*, hydroelectric facilities in Saskatchewan and Alberta respectively, had been previously approved under provincial environmental assessment laws.

<sup>92</sup> *Friends of the Island Inc. v. Can. (Minister of Public Works)* (1993), 10 C.E.L.R. (N.S.) 204 (F.C.T.D.) (generic initial environmental evaluation failed to fully consider environmental implications of later specific bridge proposal, resulting in court order requiring environmental assessment of specific bridge design).

court decisions, as well as international factors,<sup>93</sup> helped spur Parliament to enact CEAA to resolve these and related issues.

During the ten year period 1984-1994, several mining projects subject to EARPGO were considered by the courts. In *Curragh Resources Inc. v. Canada (Minister of Justice)*,<sup>94</sup> the Federal Court of Appeal held that the Department of Indian Affairs and Northern Development (“DIAND”), as a department with decision making responsibility for a proposal, could rely on EARPGO as a basis for requiring a mining company to provide \$4.4 million in security for the purpose of mitigating the adverse environmental effects of acid mine drainage to water quality and fish in streams leading from two-zinc mines proposed by the proponent.<sup>95</sup> In another federal court decision involving mining activity, *Canadian Parks and Wilderness Society v. Canada (Minister of Indian Affairs and Northern Development)*,<sup>96</sup> the Federal Court Trial Division held that a federal department subject to EARPGO did not err in law by failing to include in its screening report the environmental effects that bulldozer activity would have at the mine site, nor did the department attempt to ignore cumulative environmental effects or circumvent an effective review process by having the mining project evaluated on a piecemeal basis.<sup>97</sup> However, even though the court recognized that the screening report did not consider the significance of a heritage river that would be potentially effected by the project, and that the department did not notify or seek the comments of the applicants whose members would be directly effected, the court dismissed the application to have the mining permits declared invalid because the bulldozer activity was already completed and therefore no useful purpose would be served by granting the order requested.<sup>98</sup>

Also during this period several major uranium mining and refining projects in Ontario and Saskatchewan were the subject of expert panel reviews, some of which recommended approval,<sup>99</sup> others of which recommended rejection.<sup>100</sup> In

<sup>93</sup> Schrecker, *supra* note 88, at 193-194 (credibility of federal government's support for Brundtland Commission's principles of sustainable development jeopardized by widespread perception of the historical weakness of federal environmental assessment procedures).

<sup>94</sup> *Curragh Resources Inc. v. Can. (Minister of Justice)* (1993), 11 C.E.L.R. (N.S.) 173 (F.C.A.).

<sup>95</sup> *Id.* at 192.

<sup>96</sup> *Canadian Parks and Wilderness Soc'y v. Can. (Minister of Indian Affairs and N. Dev.)*, (1996), 19 C.E.L.R. (N.S.) 271 (F.C.T.D.).

<sup>97</sup> *Id.* at 286-287 (noting that the cumulative effects doctrine, which is designed to ensure that the full impact of an activity is not minimized by dividing a proposal into several different applications and seeking to have the environmental impacts of each assessed without regard to the others, was not applicable in *Canadian Parks* because the situation was one where an ancillary aspect of a development activity is subject to review, because a government issued permit is required, while the main activity in question is not).

<sup>98</sup> *Id.* at 287.

<sup>99</sup> See, e.g., DOMINIQUE – JANINE EXTENSION, MCCLEAN LAKE PROJECT, AND MIDWEST JOINT VENTURE ENVTL. ASSESSMENT REVIEW PANEL (1993) (Dominique – Janine extension recommended for approval subject to conditions); and MCARTHUR RIVER UNDERGROUND EXPLORATION PROGRAM ENVTL. ASSESSMENT JOINT FEDERAL PROVINCIAL REVIEW PANEL (1993) (underground exploration program recommended, subject to conditions).

connection with subsequent changes to one of these projects in Saskatchewan, the Federal Court Trial Division held in *Shiell v. Atomic Energy Control Board*,<sup>101</sup> that an applicant seeking an order requiring a federal regulatory board to refer the proponent's new uranium mine tailings disposal system to an expert panel under EARPGO, lacked standing to bring such an application because she lived several hundred miles from the facility, had no direct personal interest in the matter, and the board's decision to amend the proponent's licence did not affect her any differently than other members of the public.<sup>102</sup>

### ***c. Canadian Environmental Assessment Act***

In January 1995, CEAA came into force. This statute replaced EARPGO, which the federal government described as a "vague" process that had "prompted numerous court challenges, high costs and long delays."<sup>103</sup> CEAA requires that an environmental assessment be conducted where a federal authority, called a responsible authority under the statute: (1) is the proponent of the 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 prescribed regulatory duty such as issuing a permit, licence, or approval.<sup>104</sup> Physical works are subject to CEAA unless exempted.<sup>105</sup> Physical activities are not subject to CEAA unless they are designated.<sup>106</sup> Four regulations under CEAA determine which projects will be assessed and the level of environmental assessment required. The Exclusion List Regulations exempt those physical works by category deemed to have insignificant environmental effects.<sup>107</sup> The Inclusion List Regulations designate physical activities by category that will be subject to environmental assessment if they are subject to any of the provisions of Acts, regulations, or otherwise identified in a schedule to the Inclusion List Regulations.<sup>108</sup> The Law List Regulations contain regulatory provisions from numerous federal statutes that will trigger a requirement to

<sup>100</sup> See, e.g., RABBIT LAKE URANIUM MINING A-ZONE, D-ZONE, EAGLE POINT ENVTL. ASSESSMENT REVIEW PANEL (1993) (mining at A-zone and D-zone not recommended to proceed until further studies undertaken and suitable mitigation established).

<sup>101</sup> *Shiell v. Atomic Energy Control Board* (1995), 17 C.E.L.R. (N.S.) 286 (F.C.T.D.).

<sup>102</sup> *Id.* at 290-291.

<sup>103</sup> 128 Can. Gaz. Part II, 3388 (1994) (regulatory impact analysis statement accompanying CEAA regulations).

<sup>104</sup> CEAA, R.S.C. 1985, c. C-15.2, s. 5.

<sup>105</sup> *Id.*, ss. 5, 7. Projects are physical works that include any proposed construction, operation, modification, decommissioning, abandonment or other undertaking in relation to those physical works. *Id.*, s. 2. A physical work may be exempted by the Exclusion List Regulations, or if the project is to be carried out in response to an emergency. Otherwise it is a project subject to CEAA.

<sup>106</sup> *Id.*, s. 59(b). Projects are physical activities that do not relate to a prescribed physical work designated under section 59(b). Physical activities designated by the Inclusion List Regulations are projects subject to CEAA.

<sup>107</sup> Exclusion List Regulations, SOR/94-639 (1994).

<sup>108</sup> Inclusion List Regulations, SOR/94-637 (1994).

perform an environmental assessment.<sup>109</sup> The Comprehensive Study List Regulations designate projects by category that are likely to have significant adverse environmental effects and for which the most rigorous study will be required.<sup>110</sup> Several types of major mining and mineral processing projects are identified under this regulation.<sup>111</sup>

Under CEAA, an agency is established, the Canadian Environmental Assessment Agency (“Agency”), whose objects include administering the process and promoting uniformity and harmonization in the assessment of environmental effects across Canada.<sup>112</sup> The responsible authority, however, determines the scope of the environmental assessment and is responsible for the early stages of the process, including the screening process for those projects likely to have routine or low impacts.<sup>113</sup> If, after screening, more investigation is necessary or if public concern warrants a public review, the responsible authority must refer the project to the federal minister of the environment<sup>114</sup> who then refers the project to mediation, or a review and hearing by an expert panel, including where necessary a joint federal-provincial panel, that can compel persons to give testimony.<sup>115</sup> However, under CEAA the responsible authority, or ultimately the federal cabinet, may still approve any project likely to have “significant adverse environmental effects which can be justified in the

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<sup>109</sup> Law List Regulations, SOR/94-636 (1994).

<sup>110</sup> Comprehensive Study List Regulations, SOR/94-638 (1994).

<sup>111</sup> *Id.*, 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. The threshold production capacity for the application of CEAA to a mining project under these regulations would appear to be quite high, and would appear to result in only mega-projects, not smaller scale mining projects, being subject to environmental assessment requirements. For example, the required production capacity for a proposed coal mine to be subject to the regulations is 3,000 tonnes per day. Assuming 200 days of operation per year (less than 20 days of operation per month), the threshold requirement for application of CEAA to a coal mine pursuant to these regulations would be production capacity of 600,000 tonnes per year. By comparison, British Columbia currently requires any proposed coal mine with a production capacity of 100,000 tonnes per year to be treated as a reviewable project under that province’s environmental assessment requirements. B.C.’s requirements may be loosened if proposed amendments to provincial regulations are approved that would raise the threshold for a coal mine to be treated as a reviewable project to 250,000 tonnes per year. See *infra* note 176 and accompanying text.

<sup>112</sup> CEAA, R.S.C. 1985, c. C-15.2, ss. 61-63.

<sup>113</sup> *Id.*, ss. 15-20. *But see* Friends of the West Country Ass’n v. Can. (Minister of Fisheries and Oceans) Court File No. T-1893-96 (F.C.T.D. July 8, 1998) (QUICKLAW) (screening environmental assessment reports are essential statutory preliminary steps required by CEAA prior to issuance of approvals, and deficiencies in such reports may be subject to judicial review).

<sup>114</sup> *Id.*, s. 20.

<sup>115</sup> *Id.*, s. 29 (referral of matter by Minister to a mediator or review panel), s. 40 (joint review panels authorized). See *Alberta Wilderness Ass’n v. Canada (Minister of Fisheries and Oceans)* (1998), F.C.J. No. 1746 (F.C.A., 1998) (QUICKLAW) (review panel report essential statutory preliminary step required by CEAA prior to issuance of approvals, and deficiencies in such reports may be subject to judicial review).

circumstances.”<sup>116</sup> Whether environmental effects can or cannot be justified in the circumstances is a highly vague and subjective test that places the responsible authority in the same position to make a final decision as was the case under EARP and EARPGO. Moreover, the test invites the very judicial scrutiny that the federal government sought to avoid by compelling members of the public to seek to ensure that government adheres to essential statutory preconditions to approval.<sup>117</sup>

Overall concerns with CEAA may be summarized as follows: (1) proponents review the environmental effects of their own projects (self-assessment) and may, particularly where they also are the responsible authority, ignore the recommendations made by expert review panels;<sup>118</sup> (2) it is not mandatory for proponents to assess the need for their projects, nor to assess alternatives to their projects;<sup>119</sup> (3) CEAA focuses on physical works or construction,<sup>120</sup> a narrower examination than what was possible under EARPGO,<sup>121</sup> and which excludes policies, plans, and programs that spawn a myriad of physical works;<sup>122</sup> (4) principles of fairness and due process are not guaranteed at review panel hearings;<sup>123</sup> (5) participant funding for members of

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<sup>116</sup> *Id.*, s. 37.

<sup>117</sup> See, e.g., *Alberta Wilderness Ass'n v. Can. (Minister of Fisheries and Oceans)*, (1998), F.C.J. No. 1746 (F.C.A., 1998) (QUICKLAW) (minister, as responsible authority, is constrained by panel report in that the minister is only authorized to make final decision on whether environmental effects of Cheviot Coal Project significant and, if significant, whether justifiable in the circumstances, once report meets CEAA requirements). See also Doug Watters, *Federal Environmental Assessment: Getting to the Merits*, LEGAL EMISSIONS, Dec. 1998, at 20.

<sup>118</sup> *Id.*, ss. 11, 15, 20, 37.

<sup>119</sup> *Id.*, s. 16 (in discretion of responsible authority).

<sup>120</sup> *Id.*, ss. 2, 7, 59(b) (project defined as physical work not exempted by CEAA Exclusion List Regulations; and physical activities designated as subject to CEAA by the Inclusion List Regulations).

<sup>121</sup> EARPGO covered any “proposal” which included any initiative, undertaking, or activity for which the Government of Canada has a decision making responsibility, and that may have an environmental effect on an area of federal responsibility. EARPGO, SOR/84-467, ss. 2, 6(b) (1984).

<sup>122</sup> RODNEY NORTHEY, *THE 1995 ANNOTATED CANADIAN ENVIRONMENTAL ASSESSMENT ACT 593* (1995) (definition of project clearly limited to physical changes not plans, policies, or programs and thus the latter matters are not assessed under CEAA); and Stephen Hazell & Hugh Benevides, *Federal Strategic Environmental Assessment: Towards a Legal Framework*, 7 J. ENVTL. L & PRAC. 349, 371-373 (1998) (noting the federal government has had mining policies in place for decades and outlining the need for a legal requirement for federal authorities to conduct environmental assessments of policies, plans, and programs likely to have adverse environmental effects).

<sup>123</sup> When a review panel holds a hearing it must offer the public an opportunity to participate. CEAA, R.S.C. 1985, c. C-15.2, s. 34. However, CEAA makes no reference to panel compliance with the rules of natural justice or procedural fairness, standing, notice, right to counsel, right to present evidence, or cross-examine witnesses. Moreover, under EARPGO to be eligible for panel appointment an expert had to be “free of any political influence.” EARPGO, SOR/84-467, s. 22(b) (1984). This requirement has been removed from CEAA. R.S.C. 1985, c. C-15.2, s. 33.

the public is not mandatory for review panel hearings or mediations;<sup>124</sup> (6) it is not an offence for proponents to ignore or violate CEAA or its regulations;<sup>125</sup> and (7) the public cannot seek injunctions to restrain violations of ministerial orders.<sup>126</sup>

Major mining projects that have been, or are currently, subject to CEAA exhibit some of the same problems with the approach of federal departments as occurred under EARP and EARPGO. In *Union of Nova Scotia Indians v. Canada (Attorney General)*,<sup>127</sup> the Federal Court Trial Division set aside federal fisheries department decisions to issue approvals under the Fisheries Act to a mining company that planned to dredge a lake bottom to facilitate its industrial operations. The court found that despite brief references in the department's screening report of potential adverse effects, the actual use of fishery resources within the lakes by the aboriginal community was not addressed carefully, or at all. The court held that it was essential that the responsible authority address environmental effects under CEAA. The court observed that it might be that, if reviewed, the result would be the same, but that could not be assumed without consideration of the matter. Failure to consider the Crown's fiduciary duty and responsibility to the aboriginal community constituted a failure by the government to act with fairness towards them in the environmental process. Accordingly, it was an error of law to fail to address the aboriginal interests, and to assess whether any environmental effect was warranted.<sup>128</sup>

Other recently completed mining project proposals under CEAA have generated considerable controversy regarding the adequacy of the review panel process and resulting recommendations. In the case of an open pit and underground diamond mining project in the North West Territories recommended for approval, the review panel, despite producing 29 recommendations,<sup>129</sup> failed to make any recommendations in such areas as: (1) sustainable development and cumulative effects; (2) mine closure and reclamation; (3) alternatives to the project or alternative methods of carrying out the project; (4) wilderness and protected areas; and (5) mining impacts on traditional resource harvesting

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<sup>124</sup> *Id.*, s. 58 (i) (minister may establish a participant funding program to facilitate the participation of the public in mediations and assessments by review panels).

<sup>125</sup> CEAA is silent on offences or penalties for violations of the Act or regulations.

<sup>126</sup> *Id.*, s. 51 (only Attorney General of Canada may seek injunction for violation of ministerial order issued under section 50).

<sup>127</sup> *Union of Nova Scotia Indians v. Can. (Attorney General)* (1997), 22 C.E.L.R. (N.S.) 293 (F.C.T.D.).

<sup>128</sup> *Id.* at 313-315. The federal environment commissioner recently reported that, generally, significant environmental consequences can be overlooked and environmental damage can occur as a result of deficiencies in the conduct of screenings by federal departments. These deficiencies are of particular concern as screenings account for more than 99 percent of the approximately 5,000 environmental assessments carried out each year under CEAA. COMM'R OF THE ENV'T AND SUSTAINABLE DEV., REPORT TO THE HOUSE OF COMMONS 6-5 (1998).

<sup>129</sup> BHP DIAMONDS INC. ENVTL. ASSESSMENT REVIEW PANEL, EXECUTIVE SUMMARY (1996).

activities.<sup>130</sup> These and related gaps caused one of the major intervenors in the case to characterize the resulting environmental review as fundamentally flawed and neither comprehensive, rigorous, nor fair.<sup>131</sup> The federal government nonetheless accepted the panel's recommendations and approved the project.<sup>132</sup> This project, among others, has caused some commentators to question whether the federal environmental assessment process is a failure, particularly in connection with resource development issues in northern Canada,<sup>133</sup> though these concerns are disputed by the Agency.<sup>134</sup>

Environmental impact assessment guidelines for a major nickel and cobalt mine/mill project in Voisey's Bay, Labrador have recently been developed by an expert review panel. These guidelines may be the most comprehensive guidelines yet developed for mining activities under federal environmental assessment procedures,<sup>135</sup> although generic environmental assessment guidelines for mining activities also have been developed.<sup>136</sup> The scope of the guidelines for the Voisey's Bay project is in part a function of a unique memorandum of understanding ("MOU") developed between the Governments of Canada and Newfoundland/Labrador, the Innu Nation of Labrador, and the Labrador Inuit Association. Factors to be considered by the proponent in its environmental assessment include need, consideration of alternatives, and examination of cumulative environmental effects.<sup>137</sup> However, this project also has been controversial, in part because of attempts by the proponent to seek provincial approval to construct major infrastructure facilities including a dock, an airstrip, and a road at the mine exploration site while the environmental assessment studies under CEAA are in progress, and before the review panel holds its hearings.<sup>138</sup> While the proponent maintained that these facilities were not part of the process that is subject to environmental assessment and review

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<sup>130</sup> Letter from Terry Fenge, Executive Director, Canadian Arctic Resources Committee, to the Hon. Sergio Marchi, Minister of Environment (June 21, 1996).

<sup>131</sup> *Id.*

<sup>132</sup> Kevin O'Reilly, *Diamond Mining and the Demise of Environmental Assessment in the North*, NORTHERN PERSPECTIVES, Fall-Winter 1996, at 1-4.

<sup>133</sup> ANDREW NIKIFORUK, *THE NASTY GAME: THE FAILURE OF ENVIRONMENTAL ASSESSMENT IN CANADA* 11-14, 17-18, 21-23 (1997) (suggesting concerns with the BHP environmental assessment included failure to consider need, purpose, alternatives to the undertaking, cumulative effects and related matters).

<sup>134</sup> CANADIAN ENVIRONMENTAL ASSESSMENT AGENCY, *RESPONSE TO REPORT BY ANDREW NIKIFORUK ON THE STATUS OF ENVIRONMENTAL ASSESSMENT IN CANADA* (1998) (suggesting, for example, that cumulative effects were considered in the BHP case).

<sup>135</sup> VOISEY'S BAY MINE AND MILL PROJECT ENVTL. ASSESSMENT PANEL, *FINAL ENVTL. IMPACT STATEMENT GUIDELINES FOR THE UNDERTAKING* (1997) [hereinafter VOISEY'S BAY GUIDELINES].

<sup>136</sup> CANADIAN ENVIRONMENTAL ASSESSMENT AGENCY, *GUIDE TO INFORMATION REQUIREMENTS FOR ENVIRONMENTAL ASSESSMENT OF MINING PROJECTS IN CANADA* (1998).

<sup>137</sup> VOISEY'S BAY GUIDELINES, *supra* note 135, at 1.

<sup>138</sup> Voisey's Bay Mine and Mill Project Env'tl. Assessment Panel, Transcript of Proceedings of the Scoping Session (Apr. 25, 1997) (testimony of Daniel Ashini, vice-president, Innu Nation of Labrador).

by the panel,<sup>139</sup> others raised concerns that approval and construction of these facilities in advance of, or simultaneously with, the CEAA process was an attempt to circumvent the statute.<sup>140</sup>

Still more recent mining project proposals in their preliminary stages continue to demonstrate some of the fundamental, underlying concerns with the CEAA process as a whole. These concerns include short notice and comment periods, inadequate or no participant funding, and lack of process clarity and objectives.<sup>141</sup>

Overall, the CEAA process exhibits many of the limitations of its predecessor regimes. If, as the Supreme Court of Canada stated in *Friends of the Oldman River Society* that, environmental assessment is a planning tool, then the statute's focus on physical works is too narrow and too late in the decision making process to deal with issues of multiple exploration activities in the same region such as are currently being experienced in northern Canada. Environmental examination of development, including mining activities, in an isolated, fragmented, and piece-meal fashion is contrary to the spirit and purpose of environmental assessment and sustainable development principles.<sup>142</sup> What should first be examined in the context of environmental assessment is government policies, plans, and programs that stimulate such development activities in particular regions, and not merely the end-result of such policies, one project at a time. Although CEAA is the third version of federal environmental assessment procedures in the last twenty-five years, much work remains to be done to improve the process.

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<sup>139</sup> *Id.* (testimony of Bevin LeDrew, manager, environmental assessments, Voisey's Bay Nickel Co.).

<sup>140</sup> *Id.* (testimony of Daniel Ashini). In September 1997, the Newfoundland Court of Appeal quashed a provincial minister's order that would have permitted these activities to proceed without an environmental assessment holding that the minister made a false dichotomy between exploration and mining when he said that the former were not subject to environmental assessment while the latter were under the MOU between the parties). See *Labrador Inuit Ass'n v. Nfld. (Minister of Env't and Labour)* (1997), 155 Nfld. & P.E.I.R. 93, 112-113 (Nfld. C.A.).

<sup>141</sup> See, e.g., CANADIAN ARCTIC RESOURCES COMMITTEE ("CARC"), COMMENTS ON THE DRAFT DIAVIK COMPREHENSIVE STUDY GUIDELINES 1 (1998). See also CARC, BULLETIN: RIO TINTO GETS GOVERNMENT TO SHORTEN ENVIRONMENTAL ASSESSMENT OF ITS DIAVIK PROJECT 1 (Dec. 14, 1998); and CARC, BULLETIN: ABORIGINAL ORGANIZATIONS CONCERNED WITH DIAVIK/RIO TINTO COMPREHENSIVE STUDY PROCESS 1 (Dec. 10, 1998).

<sup>142</sup> The preamble to CEAA declares that the "Government of Canada seeks to achieve sustainable development by conserving and enhancing environmental quality and by encouraging and promoting economic development that conserves and enhances environmental quality." The statute also defines sustainable development consistent with that established by the Brundtland Commission: "...development that meets the needs of the present, without compromising the ability of future generations to meet their own needs." R.S.C. 1985, c. C-15.2, s. 2.

**d. Geographically Specific Federal Environmental Assessment Legislation:  
The MacKenzie Valley Resource Management Act**

The very recently enacted MacKenzie Valley Resource Management Act (“MVRMA”)<sup>143</sup> represents a geographic approach to federal environmental assessment but one which carries forward many of the same themes discussed above. MVRMA implements obligations under land claims agreements entered into between the federal government and Dene and Metis First Nations of the western Arctic.<sup>144</sup> Part 5 of the MVRMA establishes a MacKenzie Valley Environmental Impact Review Board and a process for environmental assessment of development that is very similar to CEAA in terms of preliminary screening and review.<sup>145</sup> Moreover, CEAA does not apply to any development in the geographic area covered by the MVRMA.<sup>146</sup> Whether a geographic exemption of the application of CEAA for developments in the western Arctic will prove to be beneficial to, or detrimental for, improving the performance of federal environmental assessment in Canada remains to be seen.

**3. Provincial**

Provincial environmental assessment laws vary in each of the provinces in Canada. This part examines two provincial environmental assessment regimes: (1) Ontario; and (2) British Columbia. The choice of these two provinces over others is based on two factors. First, Ontario’s law is both the oldest in Canada and perhaps, until recent amendments, the most rigorous from a hearings standpoint though infrequently applied to mining activities. Second, British Columbia’s law is the newest and already has been applied to many mining projects, although hearings have been rare. The experience with both laws may provide a contrast to federal environmental assessment procedures.

**a. Ontario**

Ontario’s Environmental Assessment Act (“OEAA”)<sup>147</sup> requires proponents of public, and designated private sector undertakings, to prepare and environmental assessment that outlines the purpose of, and rationale for, the undertaking. The environmental assessment must also consider possible alternatives to, and alternative methods of carrying out the undertaking, the affected environment, potential environmental effects, mitigation measures, and the advantages and disadvantages to the environment of the undertaking and the

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<sup>143</sup> S.C. 1997-1998, c. 25.

<sup>144</sup> *Id.*, (pre-statute summary).

<sup>145</sup> *Id.*, ss. 117-142.

<sup>146</sup> *Id.*, s. 116.

<sup>147</sup> R.S.O. 1990, c. E.18, as am.

alternatives.<sup>148</sup> For projects subject to the Act because they are a certain size, category, cost, or because they are controversial, approvals under the statute are preceded by quasi-judicial hearings before a permanent administrative tribunal that adjudicates both the adequacy of the environmental assessment and whether approval to proceed with the undertaking should be granted.<sup>149</sup> The Act and guidance documents prepared by the Ministry of the Environment (“MOE”)<sup>150</sup> in effect require a proponent to go through an environmental planning process that contains five features: (1) consultation with affected parties; (2) consideration of reasonable alternatives; (3) consideration of all aspects of the environment; (4) systematic evaluation of net effects; and (5) provision of clear and complete documentation.<sup>151</sup> Tribunal jurisprudence under the OEAA suggests that environmental assessment approvals only will be granted where the proponent: (1) demonstrates need for the project;<sup>152</sup> (2) examines a reasonable range of alternatives;<sup>153</sup> and (3) demonstrates that the environment, particularly surface water and groundwater can be protected if the undertaking proceeds.<sup>154</sup>

Experience with the OEAA, however, has been primarily in relation to public sector activities, such as hazardous waste treatment complexes, municipal waste disposal sites, highways, transmission lines, and hydroelectric facilities. Because the statute defines “undertaking” to include “plans or programs”<sup>155</sup> long-term planning activity by Crown corporations, such as for supply of electricity generation,<sup>156</sup> also has been subject to OEAA requirements, and not just individual physical works. In addition, private sector activity on Crown land, such as logging activity, has been subject to class environmental assessment hearings and decisions by an independent tribunal.<sup>157</sup> However, because the OEAA applies only to the private sector if specifically designated by regulation, few

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<sup>148</sup> *Id.*, s. 6.1.

<sup>149</sup> *Id.* ss. 9.1-9.3.

<sup>150</sup> See, e.g., ENVTL. ASSESSMENT BRANCH, MINISTRY OF THE ENV'T AND ENERGY, PLANNING AND APPROVALS GUIDE FOR INDIVIDUAL ENVTL. ASSESSMENT PROJECTS (1995) [hereinafter ENVTL. ASSESSMENT BRANCH].

<sup>151</sup> *Id.* at 7-23.

<sup>152</sup> Re Steetley CH-91-01 (1995) (Jt. Bd found need assumed by proponent unrealistic).

<sup>153</sup> Re Meaford CH-88-03 (1990) (Jt. Bd. found proponent alternative site selection process flawed and unacceptable); and Re Ont. Waste Management Corp. CH-87-02 (1994) (Jt. Board found alternative waste management systems analysis inadequate to support proponent's conclusion that selected undertaking preferred to unexamined alternatives).

<sup>154</sup> Re Halton CH-87-02 (1989) (Jt. Bd. rejected one of two proposed sites because of failure of proponent to demonstrate ability of site in its natural or engineered capacity to ensure protection of surface and groundwater regime).

<sup>155</sup> R.S.O. 1990, c. E.18, s. 1(1), as am.

<sup>156</sup> Re Ontario Hydro Demand Supply Plan EA-90-01 (F)(1990) (25 year plan for supply sources of electricity generation such as nuclear, fossil fuel, and hydroelectric facilities by provincial Crown corporation subject to OEAA). This proposal was eventually withdrawn by the proponent.

<sup>157</sup> Re Timber Management EA-87-01 (1994) (environmental assessment board approving environmental assessment of timber management planning of provincial ministry of natural resources that was surrogate proponent for timber industry in lieu of need to conduct multiplicity of hearings for Crown timber licensees).

resource extraction activities, even those on Crown lands, have been subject to designation and hearings under the statute. Emergency activities to clean up abandoned mine sites, which might otherwise have been subject to the Act because a public agency was the proponent, also have been exempted from OEAA requirements.<sup>158</sup>

Amendments to the OEAA, which came into force in 1997, grant the minister discretion to permit a proponent subject to the Act to submit terms of reference acceptable to the minister for preparation of what would be less than a full environmental assessment.<sup>159</sup> The practical effect of these amendments may be to reduce the obligation on proponents to address alternative methods of carrying out the undertaking, such as different locations for siting proposed activities, or functionally different alternatives to the undertaking, such as resource conservation, instead of resource exploitation. The extent of the application of the OEAA to mining activities, if at all, under the new amendments remains to be seen.

### ***b. British Columbia***

British Columbia's Environmental Assessment Act ("BCEAA"),<sup>160</sup> which came into force in mid-1995, applies to a project that either meets criteria set out in regulations under the Act,<sup>161</sup> or is specifically designated by the Minister of Environment, Lands, and Parks ("MELP").<sup>162</sup> Categories of mine projects that are identified in the regulations as reviewable projects<sup>163</sup> include establishment of new, or significant modification of existing coal mines,<sup>164</sup> mineral mines,<sup>165</sup> sand and gravel operations,<sup>166</sup> placer mines,<sup>167</sup> stone and industrial mineral quarries,<sup>168</sup> and off-shore mines.<sup>169</sup>

<sup>158</sup> See Exemption for Emergency Activities on Three Abandoned Mine Sites in the Townships of Tisdale and Deloro, City of Timmins, O. Reg. 169/92 (1992).

<sup>159</sup> Environmental Assessment and Consultation Improvement Act, S.O. 1996, c. 27.

<sup>160</sup> R.S.B.C. 1996, c. 119.

<sup>161</sup> *Id.*, s. 3.

<sup>162</sup> *Id.*, s. 4.

<sup>163</sup> Env'tl. Assessment Reviewable Projects Regulation, B.C. Reg. 276/95 (1995) (Part 2 – Mine Projects).

<sup>164</sup> *Id.* s. 19. A proposed coal mine is a reviewable project if the facility when completed will have a production capacity of 100,000 tonnes or more per year of clean coal or raw coal, or a combination thereof. Modification of an existing facility constitutes a reviewable project if over 250 hectares of new land will be disturbed by mining activity, or the new area to be disturbed is over 35 per cent of the area of land already disturbed by mining activity). *Id.*, s. 19(b). The 100,000 per annum tonnage production capacity is significantly greater than that required for a reviewable project under mines legislation in British Columbia, repealed when the BCEAA came into force. See Mine Development Assessment Act, S.B.C. 1990, c. 55, s. 1 (repealed 1995) (reviewable project included all coal mines capable of producing over 10,000 tonnes per year of coal).

<sup>165</sup> B.C. Reg. 276/95, s. 20 (1995) (production capacity over 25,000 tonnes per year of mineral ore).

<sup>166</sup> *Id.*, s. 21.

The proponent of a reviewable project must submit information respecting environmental, social, economic, and related matters in connection with the project including information on the existing setting, potential effects of the project, measures to prevent or mitigate adverse effects, consultation activities with the public and first nations, and other pertinent information.<sup>170</sup> Projects progress through the environmental assessment review process depending on their environmental significance. Projects with more significant environmental effects may be subject to project review by the government in which alternative sites, methods of construction, and monitoring of effects, are considered.<sup>171</sup> The Minister also may refer any application for a project approval to an administrative tribunal, the Environmental Assessment Board, for a hearing, followed by a report and recommendations.<sup>172</sup> If a project is approved, a project approval certificate is issued by the Minister following provincial cabinet approval.<sup>173</sup> Since the coming into force of the BCEAA in 1995, nine mine projects have been approved by the provincial cabinet, with other projects at various stages of review.<sup>174</sup>

If Ontario's law has been characterized by a rigorous environmental assessment and hearing regime for projects other than mining, British Columbia's law can be characterized as an environmental assessment regime that in its short history frequently has applied to mining activities, but also has never subjected mining projects to hearing requirements.<sup>175</sup> Because British Columbia's environmental assessment law only has been in effect approximately three years this situation may change in future. However, it is difficult to predict whether mining projects will ever become systematically subject to hearing

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<sup>167</sup> *Id.*, s. 22 (production capacity over 500,000 tonnes per year of pay-dirt, or mined placer gravel).

<sup>168</sup> *Id.*, s. 23 (production capacity over 250,000 tonnes per year).

<sup>169</sup> *Id.*, s. 24 (use of platform, artificial island or other physical work, and associated facilities intended for the purpose of exploration, or production of, a mineable substance from the foreshore or submerged land along a marine coastline or from an off-shore site located in salt water).

<sup>170</sup> R.S.B.C. 1996, c. 119, s.7.

<sup>171</sup> *Id.*, ss. 21-23.

<sup>172</sup> *Id.*, ss. 30-33, 51-52.

<sup>173</sup> *Id.*, s. 34. Attempts to enjoin mining activity authorized under BCEAA have been unsuccessful. See, e.g., *Tsay Keh Dene Band v. B.C. (Minister of Environment, Lands and Parks)* (1997) B.C.J. No. 1482 (B.C.S.C. June 10, 1997) (QUICKLAW) (no irreparable harm to wildlife would be caused and therefore balance of convenience in interim injunction application favouring mining company as interests of public in integrity of provincial environmental assessment process outweighed applicant Bands' interests).

<sup>174</sup> See SIERRA LEGAL DEFENCE FUND, *DIGGING UP TROUBLE: THE LEGACY OF MINING IN BRITISH COLUMBIA* 3 (1998) [hereinafter SLDF] (nine mining projects approved through mid-1998). See also B.C. ENVTL. ASSESSMENT OFFICE, *OVERVIEW AND UPDATE ON THE ENVTL. ASSESSMENT PROCESS 2-4* (1997) (through 1997, six major mines approved, with twelve more under review).

<sup>175</sup> SLDF, *supra* note 174, at 3, 13 (no public hearings for mining or other projects held under BCEAA through May 1998).

requirements under the BCEAA the way, for example, waste disposal site projects have been under the OEAA. What also is unclear is the extent of smaller scale mining activity taking place in British Columbia<sup>176</sup> that is not covered by the reviewable projects regulation, and therefore is not subject to environmental assessment requirements under the statute.

## **B. Regulatory Legislation**

In addition to environmental planning and impact assessment procedures, which in theory are meant to provide government with a comprehensive approach to considering the effects of proposed industrial activities, including mining developments, governments also apply other types of laws to supplement control of such operations. Regulatory legislation that has as its primary objective controlling emissions to air, discharges to water, or impacts to land, can be considered among the first generation of environmental statutes enacted in Canada commencing in some provinces as early as the 1950s. Mining legislation itself also has contained some elements of environmental regulation, though it is only with comparatively recent amendments to such laws in Canada that matters such as land reclamation and rehabilitation have become prominent considerations under these regimes. This part provides an overview of relevant federal and provincial regulatory legislation in Canada. Environmental protection legislation is reviewed first, followed by mining legislation.

### **1. Environmental Protection**

#### **a. Federal**

At the federal level in Canada, there are two environmental statutes that have application to control of mining activities: (1) the Canadian Environmental

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<sup>176</sup> Smaller scale mining activity in this context would be, for example, the production of less than 100,000 tonnes but more than 10,000 tonnes per annum of coal from a mine project. Indeed, amendments proposed by MELP to the regulations in late 1998 could raise the threshold production levels for certain types of mining projects and thereby reduce further the number of mines subject to full environmental assessment requirements under the BCEAA. For example, the current 100,000 tonnes per year production threshold for environmental assessment requirements to apply to new coal mines would be raised under the proposed regulations to 250,000 tonnes per year. The current 25,000 tonnes per year threshold for new mineral mines would be raised to 75,000 tonnes per year. In addition, the current 250 ha disturbed area increase or 35 per cent increase in production for mineral mine expansions to be subject to environmental assessment requirements would be raised to 750 ha or a 50 per cent increase in disturbed area. See B.C. MINISTRY OF ENV'T, LANDS AND PARKS, PROVINCE TO STREAMLINE ENVIRONMENTAL ASSESSMENT REGULATIONS (Nov. 1998); *and* B.C. MIN. OF ENV'T, LANDS AND PARKS, AMENDMENTS TO REVIEWABLE PROJECTS REGULATION (Nov. 1998).

Protection Act (“CEPA”);<sup>177</sup> and (2) the Fisheries Act.<sup>178</sup> These two statutes and applicable regulations are reviewed briefly below, to the extent their provisions have relevance to the subject of regulation of environmental impacts from mining activities.

### i. Canadian Environmental Protection Act

CEPA empowers the federal government to determine whether substances used in commerce and industry are toxic and to prohibit the introduction of such substances into the environment in accordance with specified terms and conditions. In particular, Part II of the statute deals first with the identification of substances that could pose a risk either to the environment or to human life and health.<sup>179</sup> Part II next provides a procedure for adding such substances to Schedule I of the Act, which is a List of Toxic Substances.<sup>180</sup> Toxic substances in Schedule I are then controlled by regulations containing terms and conditions under which such substances may be released into the environment.<sup>181</sup> CEPA’s impact on mining activities is potentially enormous given the power of the federal government to designate substances as toxic following scientific and technical assessments authorized under the statute.<sup>182</sup> In practice, however, very few assessments of substances involved in mining activities have been undertaken, and even fewer of these substances have been made subject to regulations.

There are three aspects of CEPA that are germane to the subject of environmental regulation of mining activities. The first aspect relates to the process by which certain substances, identified by the federal government on a priority list of substances for study, are assessed to determine whether they qualify as toxic and should therefore be controlled. Some substances relating to mining activities, such as nickel,<sup>183</sup> arsenic,<sup>184</sup> and cadmium,<sup>185</sup> have been

<sup>177</sup> R.S.C. 1985, c. 16 (4<sup>th</sup> Supp.).

<sup>178</sup> R.S.C. 1985, c. F-14.

<sup>179</sup> R.S.C. 1985, c. 16, ss. 11-18 (4<sup>th</sup> Supp.) (defining toxic substances, establishing Priority Substances List, and gathering information).

<sup>180</sup> *Id.*, s. 33.

<sup>181</sup> *Id.*, s. 34.

<sup>182</sup> *Id.*, ss. 28-32.

<sup>183</sup> GOV’T OF CAN., NICKEL AND ITS COMPOUNDS: PRIORITY SUBSTANCES LIST ASSESSMENT REPORT UNDER THE CAN. ENVTL. PROTECTION ACT 7-9, 42, 52-53 (1994) [hereinafter NICKEL ASSESSMENT] (nickel released into Canadian environment as a result of mining, smelting, refining, alloy producing, scrap metal operations, and other metal operations).

<sup>184</sup> GOV’T OF CAN., ARSENIC AND ITS COMPOUNDS: PRIORITY SUBSTANCES LIST ASSESSMENT REPORT UNDER THE CAN. ENVTL. PROTECTION ACT 4-5, 33-34 (1993) [hereinafter ARSENIC ASSESSMENT] (arsenic released into Canadian environment as a result of active and abandoned gold and base metal mining and ore processing facilities).

<sup>185</sup> GOV’T OF CAN., CADMIUM AND ITS COMPOUNDS: PRIORITY SUBSTANCES LIST ASSESSMENT REPORT UNDER THE CAN. ENVTL. PROTECTION ACT 5-8, 46-48 (1994) [hereinafter CADMIUM ASSESSMENT] (cadmium released into the Canadian environment as a result of base metal mining and refining).

assessed under Part II of CEPA and, in reports issued in 1993 and 1994, have been found to be toxic, but to date have not been placed in Schedule I for control by regulation. Part of the delay may arise from the fact that the mining industry has expressed concern that these metals, regarded as important to the industry, will in fact be declared “CEPA-toxic” and made subject to controls under the statute.<sup>186</sup> Notwithstanding that the CEPA assessments of these substances involved a review of all available technical, scientific, health, and related information,<sup>187</sup> the mining industry would prefer that before these substances are declared “CEPA-toxic” and subjected to controls under the statute, that a thorough risk assessment be conducted.<sup>188</sup> Whether and, if so, when these substances will be made subject to controls under CEPA remains to be seen.

The second aspect relates to those substances arising from mining activities that have been placed in Schedule I and made subject to regulation. Two substances, lead from secondary lead smelter operations<sup>189</sup> and asbestos from asbestos mines and mills,<sup>190</sup> have been placed in Schedule I of CEPA and made subject to regulation. In both regulations, releases of the substances to the air environment above certain limits from these operations are prohibited, and procedures for sampling and reporting information to the federal government are set out.<sup>191</sup> Because the control of these substances under CEPA is tied to a particular phase of mining activity and only to the air environment, it is not possible currently to regulate the entire life-cycle of the substance in other phases of the mining process, or other parts of the environment. For example, while the release of lead to the air environment from secondary lead smelters is regulated by CEPA, the release of lead to other parts of the environment or during the exploration, mining, and closure phases, is not. Given that the placing of a substance in Schedule I of CEPA means that the government has concluded that the substance is toxic, and given that there are four phases of mining activity during which releases of lead to the environment may occur, not just one, the limitation of controls on lead in this manner may not be warranted in the circumstances. Moreover, both regulations apply only to releases to air,<sup>192</sup> not to other environmental media or pathways, such as land, surface water, or groundwater. As a result, there would appear to be obvious gaps in protecting the eco-system as a whole from the adverse effects of these toxic substances.

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<sup>186</sup> KAREN HURLBURT, CONFERENCE BD. OF CAN., GOV'T NON-FISCAL MEASURES AND THE COMPETITIVENESS OF THE CANADIAN NON-FERROUS METALS INDUSTRY 9-10 (1995).

<sup>187</sup> See, e.g., ARSENIC ASSESSMENT, *supra* note 184, at 1-2.

<sup>188</sup> HURLBURT, *supra* note 186, at 10.

<sup>189</sup> Secondary Lead Smelter Release Regulations, SOR/91-155 (1991).

<sup>190</sup> Asbestos Mines and Mills Release Regulations, SOR/90-341 (1990).

<sup>191</sup> SOR/91, ss 3-6 (releases to air of lead), ss. 8-12, 14-15 (sampling and reporting); SOR/90-341, ss. 3-4 (releases to air of asbestos fibres), ss. 6-10 (information, sampling, and reporting).

<sup>192</sup> SOR/91-155, ss. 3-6 (releases to air of lead); SOR/90-341, ss 3-4 (releases to air of asbestos fibres).

The third aspect of CEPA that impacts mining activities relates to regulations governing the import, export, and transit through Canada of hazardous wastes.<sup>193</sup> These wastes can include metal wastes, as well as metals destined for recycling, because under the law there is no definitional distinction between material destined for recycling and material destined for final disposal.<sup>194</sup> Because the recycling of metals is an increasingly important component of the non-ferrous metals industry, the industry would prefer that metal recyclables not be classified as waste, or be specifically exempted from compliance with CEPA regulations, because compliance with these regulations is far more expensive than compliance with regulations managing non-hazardous waste.<sup>195</sup> On the other hand, the movement of such material whether for purposes of recycling or for disposal poses an equal problem for the environment should they be mis-managed.<sup>196</sup>

There are also a number of emerging initiatives related to CEPA that have the potential to influence regulation of the mining industry in future. These include: (1) development of a base metal smelter strategic options process;<sup>197</sup> (2) planned priority substance list assessment of releases from primary and secondary copper and zinc smelters and refineries;<sup>198</sup> and (3) imminent adoption by Parliament of a new CEPA.<sup>199</sup> The extent to which any of these initiatives

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<sup>193</sup> Export and Import of Hazardous Wastes Regulations, SOR/92-637 (1992), as am.

<sup>194</sup> *Id.*, Part II (export and import of hazardous wastes for final disposal); and Part III (export and import of hazardous wastes for recycling). See also 128 Can. Gaz. Part II, 2655 (1994) (regulatory impact analysis statement noting that certain metal bearing wastes destined for recycling are exempt from regulation in the United States but are considered hazardous wastes in Canada).

<sup>195</sup> HURLBURT, *supra* note 186, at 10-11. The natural resources standing committee of Parliament recommended that the federal government develop a "usable definition of waste that excludes safe and environmentally appropriate metal recyclables." STREAMLINING ENVTL. REGULATION, *supra* note 6, at 30.

<sup>196</sup> STREAMLINING ENVTL. REGULATION, *supra* note 6, at 28-30 (noting concerns of Environment Canada that due caution must be exercised when dealing with potentially toxic substances and that while recycling should be promoted, appropriate environmental standards should be established).

<sup>197</sup> MINING ASSOCIATION OF CAN., 1997-1998 ANNUAL REPORT 10 (1998) [hereinafter MAC ANNUAL REPORT].

<sup>198</sup> *Id.*

<sup>199</sup> See Bill C-32, Canadian Environmental Protection Act, 1998 ("CEPA 1998"), 36<sup>th</sup> Parl., 1<sup>st</sup> Sess., 46-47 Eliz II 1997-1998 (first reading Mar. 12, 1998, House of Commons). Bill C-32 is currently in hearings before the Parliamentary Standing Committee on Environment and Sustainable Development and is expected to be in force by the spring 1999. Among other things, CEPA 1998 is expected to implement a fast-track approach to evaluating and controlling toxic substances. See ENVIRONMENT CAN., STRENGTHENING ENVIRONMENTAL AND HEALTH PROTECTION IN CANADA 1-3 ((Mar. 12, 1998). The mining industry trade association has given testimony on CEPA 1998 in which it has sought assurances that a substance would not be added to Schedule I of the Act unless it meets the definition of "toxic" set out in section 65 of Bill C-32, which is unchanged from the current law. See MINING ASSOCIATION OF CAN., SUBMISSION ON BILL C-32, CAN. ENVTL. PROTECTION ACT, 1998 4 (1998).

materially changes regulation of the mining industry in Canada remains to be seen.

Overall, CEPA is a statute that applies to some substances important to the mining industry. The law has the potential to become significantly more important to the industry depending on the extent to which the federal government: (1) designates additional substances as toxic and imposes prohibitions on their use under existing or new legislative requirements; and (2) expands the scope of control on toxic substances already designated to other mining phases and aspects of the environment. In addition, CEPA control of the movement of hazardous wastes captures metal wastes destined for recycling, which has resulted in industry lobbying to remove the hazardous waste designation from such materials.

## ii. Fisheries Act

There are four aspects of the Fisheries Act that are important to the conduct of mining activities in Canada. First, there is a prohibition on carrying out any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat.<sup>200</sup> Second, there also is a prohibition on the deposit of deleterious substances in water frequented by fish.<sup>201</sup> Both of these prohibitions are subject to a defence of due diligence.<sup>202</sup> Third, deposit of certain substances into waters frequented by fish is permissible if allowed by regulation.<sup>203</sup> Under regulations promulgated by the federal government, liquid effluent discharges from metal mining operations to water frequented by fish are allowed in certain concentrations and circumstances.<sup>204</sup> Fourth, any project that requires federal authorization to alter fish habitat or that requires modifications following the production of plans and specifications in connection therewith, automatically subjects the project to environmental assessment requirements under CEAA.<sup>205</sup> Experience with respect to each aspect is considered below.

The prohibitions on altering fish habitat and depositing deleterious substances into water frequented by fish have resulted in numerous prosecutions of mining companies over the years. The cases demonstrate three things: (1) a wide variety of mining activities may give rise to quasi-criminal liability under this

<sup>200</sup> R.S.C. 1985, c. F-14, s. 35(1).

<sup>201</sup> *Id.*, s. 36(3).

<sup>202</sup> *Id.*, s. 78.6 (persons may escape quasi-criminal liability under the statute if they exercise all due diligence to prevent the commission of the offence; or reasonably and honestly believed in the existence of facts that, if true, would render their conduct innocent).

<sup>203</sup> *Id.*, s. 36(4).

<sup>204</sup> Metal Mining Liquid Effluent Regulations, C.R.C., c. 819, s. 4-5, as am.

<sup>205</sup> CEAA, Law List Regulations, SOR/94-636, Sch. I, Part I (1994) (listing ss. 35(2) and 37(2) of Fisheries Act subjects projects covered by these provisions to the requirements of CEAA).

statute,<sup>206</sup> (2) the courts take into account several factors in sentencing defendants under this legislation;<sup>207</sup> and (3) the defence of due diligence to a prosecution can succeed in averting liability under the Act in certain circumstances.<sup>208</sup> However, in some parts of the country, responsibility for ensuring compliance and enforcement of the Fisheries Act rests with the provinces by formal or informal arrangement with the federal government. Recently, some provinces have announced their intention to cease providing enforcement of the fish habitat provisions of the Act, and returning this responsibility to the federal government.<sup>209</sup> With severe budget cuts currently being experienced by both levels of government, this decision may result in future problems in achieving compliance and enforcement under the statute.<sup>210</sup>

Pursuant to enabling provisions under the Fisheries Act,<sup>211</sup> regulations were promulgated in 1977 to protect fish and fish habitat from deleterious substances in liquid effluent from metal mines.<sup>212</sup> The regulations apply to every new, expanded, and re-opened mine, other than a gold mine.<sup>213</sup> Existing mines in operation before 1977 are not covered by the regulations unless they have expanded or re-opened since 1977, or increased their production rate by more than thirty percent from 1977.<sup>214</sup> The regulations prescribe several substances as deleterious and set limits on the concentrations of such substances that may appear in metal mining effluent. The prescribed substances are arsenic, copper,

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<sup>206</sup> See, e.g., *R. v. Cardinal River Coals Ltd.*, (1972), 1 F.P.R. 10A (Alta. Prov. Ct.) (discharge of water contaminated with high concentrations of coal fines into creek which flowed past open pit mines); *R. v. United Keno Mines Ltd.*, (1979), 2 F.P.R. 212 (Yukon Mag. Ct.) (tailings dam failure resulting in release of 11.8 million gallons of mining effluent containing zinc, cadmium, copper, and other minerals into nearby creek); *R. v. Equity Silver Mines Ltd.*, (1983), 3 F.P.R. 372 (B.C. Prov. Ct.) (acid mine drainage from waste rock dumps at open pit mine entering creek containing fish); *R. v. Westmin Resources Ltd.*, (1985), 4 F.P.R. 487 (B.C. Prov. Ct.) (treated effluent from metallurgical process discharged into lake killing fish under test conditions); *R. v. Queenstake Resources Ltd.*, (1990), 5 F.P.R. 421 (Yukon Terr. Ct.) (siltation from stripping operations along creekbed).

<sup>207</sup> See, e.g., *R. v. United Keno Mines Ltd.*, (1980), 19 C.E.L.R. 43 (Yukon Terr. Ct.) and *R. v. St. Lawrence Fluorspar Ltd.*, (1989), 5 F.P.R. 503 (Nfld. Prov. Ct.) (sentencing principles include nature of environment, extent of injury, criminality of conduct, extent of attempts to comply, remorse, size of corporation, profits realized by offence, criminal record, protection of the public, specific and general deterrence).

<sup>208</sup> See, e.g., *R. v. Jack Cewe Ltd.*, (1987), 4 F.P.R. 271 (B.C. Prov. Ct.) (company took all reasonable steps in the circumstances to solve environmental problems including participating in government committee which had not identified a problem with company's operations, complying with all government directions, and spending \$1.2 million on implementing environmental protection measures).

<sup>209</sup> Gary Gallon, *Ontario Deregulation Continues: Ends Enforcement Under Federal Fisheries Act*, GALLON ENV'T NEWSLETTER 1 (Sept. 8, 1997).

<sup>210</sup> *Id.*

<sup>211</sup> R.S.C. 1985, c. F-14, s. 36(4).

<sup>212</sup> Metal Mines Liquid Effluent Regulations, C.R.C., c. 819, as am.

<sup>213</sup> *Id.*, s. 3.

<sup>214</sup> *Id.*, s. 2 (definitions of new, expanded, or re-opened mines).

lead, nickel, zinc, total suspended matter, and radium 226.<sup>215</sup> The regulations also set out sampling frequencies, test methods, reporting requirements, and permitted variances.<sup>216</sup> The metal mining liquid effluent regulations have been controversial since their inception for a variety of reasons. First, when they were promulgated in 1977, they did not apply to any metal mines then operating in Canada. Second, one of the first proposed mines that was to be subject to the regulations obtained a special exemption from their requirements,<sup>217</sup> thus bring the federal process for regulating mining activities as a whole into disrepute.<sup>218</sup> Third, more recently the mining industry and a natural resources standing committee of Parliament have expressed reservations about the prohibitions on the deposit of deleterious substances in water frequented by fish contained in the regulations. The industry would prefer that the regulations take into account such factors as risk assessment, length of exposure, contaminant concentration, and the natural chemical characteristics of water bodies before making regulatory decisions.<sup>219</sup> The industry and the standing committee have also urged adoption of recommendations arising from a multi-stakeholder report on the aquatic effects of mining that could see revisions to the regulations to take into account more site-specific effects.<sup>220</sup> The federal government has noted its commitment to implementing these recommendations.<sup>221</sup> Currently a second multi-stakeholder group is developing revised regulations, code of practice, and environmental effects monitoring requirements with a view to producing draft regulations by late 1998-early 1999.<sup>222</sup>

CEAA regulations make fish habitat authorizations under the Fisheries Act a trigger for the application of federal environmental assessment requirements.<sup>223</sup> Pursuant to these regulations, mining companies have been required to conduct

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<sup>215</sup> *Id.*, ss. 4-5, and Schs. I and II.

<sup>216</sup> *Id.*, ss. 6-11.

<sup>217</sup> Alice Arm Tailings Deposit Regulations, SOR/79-345, s. 3 (1979) (directing that the Metal Mining Liquid Effluent Regulations not apply to the deposit of mill process effluent emanating from the operation of the Kitsault Mine into the waters of Alice Arm, B.C., and substituting other requirements).

<sup>218</sup> Schrecker, *supra* note 88, at 244-245 (noting that the exemption of the mining proposal from the requirements of the metal mining liquid effluent regulations was obtained without any public input and over the objections of environment department scientists, following private meetings between federal government ministers and officials, and company officials).

<sup>219</sup> STREAMLINING ENVTL. REGULATION, *supra* note 6, at 23.

<sup>220</sup> *Id.* at 24. See also GOV'T OF CAN. ET AL., ASSESSMENT OF AQUATIC EFFECTS OF MINING IN CAN. (1996) [hereinafter AQUAMIN].

<sup>221</sup> GOV'T OF CAN., RESPONSE TO THE FINAL REPORT OF THE STANDING COMMITTEE ON NATURAL RESOURCES 15-16 (1997) [hereinafter FEDERAL RESPONSE].

<sup>222</sup> *Id.* See also MAC ANNUAL REPORT, *supra* note 197, at 6-7 (noting that MAC is working to ensure that the requirements associated with the revised regulations and environmental effects monitoring program do not pose an undue burden on the mining industry).

<sup>223</sup> CEAA, Law List Regulations, SOR/94-636, Sch., Part I (1994) (listing ss. 35(2) and 37(2) of the Fisheries Act).

environmental assessments of proposed projects.<sup>224</sup> However, recent parliamentary recommendations, federal government policy proposals, and proposed amendments to the Fisheries Act would see management of fish habitat, including authorizations for the harmful alteration, disruption or destruction of fish habitat delegated to the provinces in whole or in part.<sup>225</sup> These proposals have been viewed as having the potential to eliminate this trigger, have raised concerns about the constitutionality of such delegation, and have caused concern about the ability and willingness of the provinces to take on this responsibility.<sup>226</sup> Although the proposed Fisheries Act amendments died with the calling of the 1997 federal election, the federal government remains committed to the delegation to the provinces of certain decision making responsibilities with respect to the management of fish habitat.<sup>227</sup>

Overall, the Fisheries Act is an integral instrument in the protection of fish and fish habitat, and indirectly water quality, from mining activities. A variety of initiatives are being developed or supported by the federal government, parliamentary committees, the provinces, the mining industry, or other stakeholders, that could change this picture in future for better or worse.

### **b. Provincial**

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<sup>224</sup> *Union of Nova Scotia Indians v. Can. (Attorney General)* (1997), 22 C.E.L.R. (N.S.) 293 (F.C.T.D.). See also FISHERIES AND OCEANS CAN., ANNUAL REPORT TO PARLIAMENT ON THE ADMINISTRATION AND ENFORCEMENT OF THE FISH HABITAT PROTECTION AND POLLUTION PREVENTION PROVISIONS OF THE FISHERIES ACT FOR THE PERIOD APRIL 1, 1996 TO MARCH 31, 1997 20-22 (1998) [hereinafter FISHERIES ANNUAL REPORT] (noting numerous mining projects such as Kemess South Copper and Huckleberry Copper Gold Mines in British Columbia that because they require s. 35 (2) authorizations under the Fisheries Act were made subject to CEAA); and FISHERIES AND OCEANS CAN., DECISION FRAMEWORK FOR THE DETERMINATION AND AUTHORIZATION OF HARMFUL ALTERATION, DISRUPTION OR DESTRUCTION OF FISH HABITAT 24-26 (1998) (noting relationship between section 35(2) authorizations under the Fisheries Act and the application of CEAA, the former being a trigger for the application of the latter to various projects, including mining projects).

<sup>225</sup> See STREAMLINING ENVTL. REGULATION, *supra* note 6, at 25-26; and FISHERIES AND OCEANS CAN., MINISTER MIFFLIN TABLES NEW FISHERIES ACT 1 (OCT. 3, 1996) (noting that proposed Bill C-62 would provide the legal framework for delegation of certain habitat management responsibilities to the provinces). Bill C-62 subsequently died on the Order Paper, with the federal election call of 1997. FISHERIES ANNUAL REPORT, *supra* note 224, at 10.

<sup>226</sup> See Franklin S. Gertler, *Will Protection of Fish Habitat Survive the Provincial Outing on the Federal Pond? – Policy Options for Section 35 of the Fisheries Act and Environmental Assessment*, 20 C.E.L.R. (N.S.) 211 (1996); and PAUL MULDOON & MARK WINFIELD, CAN. ENVTL. L. ASS'N AND CAN. INST. FOR ENVTL. LAW AND POL'Y, BRIEF TO THE HOUSE OF COMMONS STANDING COMM. ON NATURAL RESOURCES REGARDING MINING AND CANADA' S ENV'T 33 (1996) [hereinafter MULDOON & WINFIELD].

<sup>227</sup> FEDERAL RESPONSE, *supra* note 221, at 16-17. See also FISHERIES AND OCEANS CAN., 1998-1999 LEGISLATIVE AND REGULATORY AGENDA 13 (1998) (noting part of purpose of proposed delegation is to meet requests of the provinces and industry to rationalize numerous purportedly and conflicting approvals processes).

At the provincial level in Canada, there are numerous environmental statutes of general application that also are relevant to the regulation of mining operations. For the purposes of this update, the principle environmental laws of two provinces, Ontario and British Columbia, are reviewed.

## i. Ontario

There are two environmental statutes in Ontario that have application to control of mining operations: (1) the Environmental Protection Act (“EPA”);<sup>228</sup> and (2) the Ontario Water Resources Act (“OWRA”).<sup>229</sup> Each statute will be briefly reviewed below.

The EPA, administered by the MOE, is the province’s most comprehensive environmental law, having application to air, water, and land pollution.<sup>230</sup> The statute contains a general prohibition on pollution,<sup>231</sup> establishes a permit program for dischargers which in effect constitutes an exception to the general pollution prohibition,<sup>232</sup> authorizes the issuance of a variety of environmental remediation orders,<sup>233</sup> creates an appeals tribunal in respect of approvals and orders,<sup>234</sup> establishes a complex set of offences and penalties,<sup>235</sup> including provisions creating environmental liability for officers and directors of corporations,<sup>236</sup> creates a special set of liabilities and obligations in relation to spills of pollutants into the environment,<sup>237</sup> authorizes special management and

<sup>228</sup> R.S.O. 1990, c. E.19, as am.

<sup>229</sup> R.S.O. 1990, c. O.40, as am.

<sup>230</sup> R.S.O. 1990, c. E.19, s. 1(1), as am. (definition of natural environment includes air, water, and land of the province).

<sup>231</sup> *Id.*, s. 14(1) (prohibition on discharging a contaminant into the natural environment that causes or is likely to cause an adverse effect, which generally refers to impairing the natural environment for any use that can be made of it).

<sup>232</sup> *Id.*, s. 9 (authorizing air approvals), part V (authorizing waste disposal site approvals).

<sup>233</sup> *Id.*, s. 7 (control orders), s. 8 (stop orders), s. 17 (remedial orders), s. 43 (waste removal orders), s. 97 (restoration orders).

<sup>234</sup> *Id.*, part XIII (establishment of environmental appeal board).

<sup>235</sup> *Id.*, ss. 186-194 (referring to offences and penalties adjudicated on and imposed by the courts). See also Environmental Statute Law Amendment Act, S.O. 1998, c. 35 (authorizing ministry directors to issue administrative monetary penalties (“AMPs”) up to \$5,000.00 for each day or part thereof that non-compliance with the EPA occurs or continues). AMPs have been viewed as an extension of the authority of MOE directors to issue administrative instruments such as clean-up orders. See Jamie Flagal, *Administrative Monetary Penalties (AMPs): The Next Logical Step in Environmental Regulatory Law*, LEGAL EMISSIONS, Dec. 1998, at 7.

<sup>236</sup> R.S.O. 1990, c. E.19, s. 194, as am (director or officer engaging in activities that may result in the discharge of a contaminant into the natural environment contrary to EPA and regulations has duty to take all reasonable care to prevent the corporation from causing or permitting the unlawful discharge and commits an offence in failing to carry out this duty).

<sup>237</sup> *Id.*, part X (owners and persons having control of pollutants have duty to notify ministry and others upon a spill occurring, and have duty to clean up and restore the natural environment to pre-spill conditions; failure to do so may subject such persons to civil, quasi-criminal and administrative liability under EPA).

control of hazardous wastes,<sup>238</sup> and allows the MOE to promulgate regulations.<sup>239</sup>

While all of the above aspects of the EPA are relevant to control of environmental contamination from mining activities, three aspects of the statute will be focused on for the purposes of this report. First, unlike the regimes under CEPA and the Fisheries Act, the EPA requires that before a company can emit contaminants into the air or dispose of them on land – water discharge certificates being issued under the OWRA – the company must obtain a certificate of approval from MOE to operate.<sup>240</sup> That authority provides the MOE with an additional element of control over operations that is missing under the federal regime. Thus, when the ministry evaluates a company for compliance with the EPA, it is also evaluating the company in relation to an instrument without which the company cannot operate in the province. The ministry, however, tends to do a better job of reporting to the public on the compliance status of holders of water pollution certificates under the OWRA, than on holders of air pollution certificates under the EPA. The ministry's evaluation of air pollution effects of mining activities tend to be more generic in nature,<sup>241</sup> rather than company specific as is the case with water.<sup>242</sup> Moreover, since June 1995 the MOE has suffered enormous budget cuts and corresponding staff cut backs<sup>243</sup> that have made it more difficult for the ministry to report on the compliance status of companies, even in relation to water, in the same degree of detail as was possible in the early 1990s.<sup>244</sup>

Second, the ministry has developed two types of controls under EPA regulations that are also applicable to mining activities; maximum concentration limits by industrial sector and total loading limits by individual company. For

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<sup>238</sup> General Waste Management Regulation, R.R.O. 1990, Reg. 347, ss. 15-24, 27, and Sch. 2, part B (defining and establishing requirements for the tracking of hazardous and liquid industrial waste).

<sup>239</sup> R.S.O. 1990, E.19, s. 176, as am. (authority to promulgate regulations for each part of statute).

<sup>240</sup> *Id.*, s. 9 (air approvals), part V (waste disposal site approvals).

<sup>241</sup> See, e.g., W. KELLER & J.M. GUNN, MIN. OF THE ENV'T AND ENERGY AND MIN. OF NATURAL RESOURCES, EFFECTS OF SUDBURY SMELTER EMISSIONS ON LAKES IN ONT.: A REVIEW AND UPDATE 1 (1994) (noting that emissions of sulphur and metal particulates from Sudbury smelters have had widespread effects on lakes in northeastern Ontario, with recent estimates indicating that over 7,000 lakes in a 17,000 square kilometre area around Sudbury having been biologically damaged due to lake acidification).

<sup>242</sup> See, e.g., 1 MIN. OF THE ENV'T AND ENERGY, REPORT ON THE 1991 INDUSTRIAL DIRECT DISCHARGES IN ONTARIO: SUMMARY OF COMPLIANCE ASSESSMENT (1993) (three-year compliance summary, particulars of monitoring results, and review of action taken to address 1991 non-compliance on a company by company basis).

<sup>243</sup> Gallon, *supra* note 209, at 1 (suggesting a 42 percent budget cut and loss of hundreds of environmental officers' positions at MOE).

<sup>244</sup> See, e.g., MIN. OF THE ENV'T AND ENERGY, 1995 WASTE WATER DISCHARGES REPORT (1996) [hereinafter 1995 WASTE WATER DISCHARGES REPORT] (qualitative summary of non-compliance only, no monitoring results included).

example, the MOE has three sets of water pollution regulations for the metal casting,<sup>245</sup> industrial minerals,<sup>246</sup> and metal mining<sup>247</sup> sectors of the mining industry. Under each regulation, maximum contaminant concentrations are set out for each sector,<sup>248</sup> in addition to sampling,<sup>249</sup> monitoring,<sup>250</sup> and reporting<sup>251</sup> requirements. The MOE also has company specific air pollution regulations to combat acid rain that set out total annual loadings that may be emitted to air by each company identified by regulation.<sup>252</sup> Several of the companies subject to the acid rain regulations are mining companies emitting some of the largest quantities of sulphur dioxide in the province. While both types of regulations provide important controls on the mining industry, the water pollution control regulations do not necessarily employ the total loading approach of the company specific acid rain regulations, and the acid rain regulations only apply to one or two mining companies operating in the province.

The third aspect of the EPA that is of particular significance to environmental control of the mining industry in Ontario relates to enforcement. Under the EPA, the ministry may prosecute violations of the statute's prohibitions, orders, approvals, or regulations as quasi-criminal offences. Under these authorities, officers and directors of mining companies have been convicted for failing to take all reasonable care to prevent their corporations from causing or permitting unlawful discharges contrary to statute.<sup>253</sup> The ministry also may issue administrative orders that are subject to appeal to the province's Environmental Appeal Board ("EAB"). This administrative body, created under the EPA, hears appeals by applicants and holders of certificates of approval regarding ministry refusals to issue approvals, or the imposition of terms and conditions thereon, or the imposition of remedial orders of various types. Experience with the EAB demonstrates that such a tribunal can provide effective

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<sup>245</sup> Effluent Monitoring and Effluent Limits-Metal Casting Sector Regulation, O. Reg. 562/94, as am.

<sup>246</sup> Effluent Monitoring and Effluent Limits-Industrial Minerals Sector Regulation, O. Reg. 561/94, as am.

<sup>247</sup> Effluent Monitoring and Effluent Limits-Metal Mining Sector Regulation, O. Reg. 560/94, as am.

<sup>248</sup> See, e.g., *Id.*, Sch. 1 (concentration limits for cyanide, total suspended solids, copper, lead, nickel, zinc, and arsenic).

<sup>249</sup> *Id.*, ss. 7-10.

<sup>250</sup> *Id.*, ss. 20-30.

<sup>251</sup> *Id.*, ss. 34-39.

<sup>252</sup> See Inco Sudbury Smelter Complex Regulation, O. Reg. 680/85; and Falconbridge Smelter Complex Regulation, O. Reg. 661/85 (source specific regulations listing maximum amount in kilotonnes of sulphur dioxide or related emission permitted per year and setting out what maximum amount will be for subsequent years).

<sup>253</sup> *R. v. Matachewan Consol. Mines Ltd.* (1994), 13 C.E.L.R. (N.S.) 156 (Ont. Ct – Gen. Div.) (director convicted of failing to take all reasonable care to prevent the corporation from causing or permitting discharge of mine tailings into river). See also *R. v. Consol. Maybrun Mines Ltd.* (1998), 26 C.E.L.R. (N.S.) 262 (S.C.C.) (accused directing mind of mining corporation cannot collaterally attack MOE administrative orders in court application after failing to avail himself of appeal mechanisms provided by EPA).

examination of complex issues such as determining ownership, management, and control of tailings disposal areas,<sup>254</sup> and determining of adverse environmental effects from mining activities.<sup>255</sup>

The OWRA is one of Ontario's oldest environmental laws, having been enacted in the 1950s. It contains many of the same provisions as the EPA, including prohibitions on water pollution, authority to issue approvals and orders regarding water pollution that constitute exceptions to the statute's prohibitions, and a complex set of offences and penalties, including provisions creating liability for officers and directors of corporations. Authority to issue water pollution regulations exists under this statute, but such regulations have in fact been promulgated pursuant to the more comprehensive powers contained in the EPA. The OWRA is also administered by the MOE. All of the OWRA provisions potentially have application to mining activities.

Two aspects of the OWRA are of particular interest in the context of mining operations. First, despite decades of regulation of the mining industry in Ontario, mining activities are still not in compliance with Ontario water pollution control requirements. For example, ministry status reports on waste water discharges showed that in 1995 all nine mining companies operating in the northern administrative region of the ministry violated the mining effluent limits of their certificates of approval under the OWRA at certain times during the year.<sup>256</sup> One company exceeded the monthly limit for zinc once and the daily limit for zinc sixteen times.<sup>257</sup>

Second, case law has demonstrated that mining companies can be convicted under the general prohibition provisions of the OWRA for discharging mine effluent that is less contaminated than the receiving water body,<sup>258</sup> that OWRA offences are those of strict liability that can result in convictions for failure to take all reasonable care to avoid commission of an offence, such as negligent maintenance of a closed mine tailings dam,<sup>259</sup> and that senior mining company managers can be vicariously liable for the actions of other individuals in charge of the actual mining operations.<sup>260</sup> With the advent of major budgetary cuts to the MOE, however, the ability of the ministry to maintain enforcement capability has been diminished. Generally, prosecutions by the ministry are down dramatically

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<sup>254</sup> *Pamour Inc. v. Director, Min. of the Env't*, File No. 00016.A1 (O.E.A.B. Sept. 8, 1992) (QUICKLAW) (ownership of mine not include tailings under applicable legislation in force at time of contamination event).

<sup>255</sup> *Preston Elec. & Mechanical Ltd. v. Director, Min. of Env't and Energy*, File No. SWO.002.90 (O.E.A.B. Oct. 14, 1993) (effects on environment of PCB contaminated transformers in underground mine).

<sup>256</sup> 1995 WASTE WATER DISCHARGES, *supra* note 244, at 16-17.

<sup>257</sup> *Id.* at 16.

<sup>258</sup> *R. v. Falconbridge Nickel Mines Ltd.* (1983), 12 C.E.L.R. 137 (Ont. Dist. Ct.).

<sup>259</sup> *Matachewan Consol. Mines Ltd.* 13 C.E.L.R. 156.

<sup>260</sup> *R. v. Sheridan*, (1972) 2 O.R. 192 (Ont. H.C.).

from previous years.<sup>261</sup> Because mining operations often are located in remote areas of the province, this may make compliance and enforcement efforts much more time-consuming and expensive. The extent to which budget cuts have resulted in ministry inability to prosecute mining companies for environmental violations is unclear at this time.

The ministry has recently produced guidelines for use at contaminated sites.<sup>262</sup> These guidelines, by definition, are without legal effect, and are not intended to apply to mining activities where closure conditions have been specified under Ontario mining legislation.<sup>263</sup> However, the guidelines could be made to apply on a case by case basis to a particular mine site or facility by ministry order or approval.<sup>264</sup>

Overall, Ontario's environmental legislation has extensive application to mining activities. Whether the ministry will be able to maintain appropriate compliance and enforcement in the face of major budget cuts remains to be seen.

## ii. British Columbia

The principal environmental statute in British Columbia is the Waste Management Act ("WMA").<sup>265</sup> As a statute of general application, the WMA also applies to mining activities. The statute contains many of the same general approaches found in Ontario's environmental legislation such as the ability to issue permits, orders, and to prosecute offences committed under the statute or regulations, as well as to manage special waste<sup>266</sup> and control spills of polluting substances.<sup>267</sup> The WMA also establishes a tribunal to hear appeals from ministry decisions on permits and approvals. Like the situation under Ontario's appeal regime, appeal hearings in British Columbia often can provide needed scrutiny on the adequacy of ministry environmental compliance and enforcement

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<sup>261</sup> See Martin Mittelstaedt, *Ontario Pollution Fines Plunge*, *Globe and Mail*, Jan. 10, 1997, at A6 (noting that in the first 10 months of 1996 prosecutions dropped by 21 percent and fines dropped by 57 percent).

<sup>262</sup> MIN. OF THE ENV'T AND ENERGY, *GUIDELINES FOR USE AT CONTAMINATED SITES IN ONT.* (1997).

<sup>263</sup> *Id.* at 4.

<sup>264</sup> *Id.*

<sup>265</sup> R.S.B.C. 1996, c. 482.

<sup>266</sup> Special Waste Regulation, B.C. Reg. 63/88 (certain sections not applying to facility where only mine tailings or waste rock managed).

<sup>267</sup> Spill Reporting Regulation, B.C. Reg. 263/90 (reporting and response requirements).

efforts,<sup>268</sup> and interpretation of the application of relevant statutes and regulations.<sup>269</sup>

Three aspects of the WMA are considered below that may have particular relevance to environmental regulation of mining activities. First, recent cases have revealed potential limitations in the WMA that can lead to enforcement problems in a variety of contexts, including with respect to mining operations.<sup>270</sup>

Second, in conjunction with on-going federal and provincial initiatives on the management of contaminated sites,<sup>271</sup> recent amendments to the WMA authorize the MELP to address problems in connection with such sites and to require remediation where necessary.<sup>272</sup> Mine owners must provide site profiles to the ministry under certain circumstances.<sup>273</sup> These site profiles may result in ministry orders to the owner to investigate and report on conditions at the site where the ministry suspects that the site may be contaminated or contain substances that may cause or threaten to cause adverse effects on human health or the environment.<sup>274</sup> Remediation orders may be issued to any responsible person,<sup>275</sup> certificates of compliance may be issued when remediation work is completed,<sup>276</sup> and the ministry may determine that a site is an orphan site and take responsibility for its restoration.<sup>277</sup> Regulations under the

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<sup>268</sup> See, e.g., *Kitimaat Village Council v. B.C. (Min. of Env't, Lands and Parks)*, Appeal No. 92/25 (B.C.E.A.B. Sept. 13, 1993) (QUICKLAW) (reviewing history of ministry enforcement practices and noting that where effluent permit is issued for smelter, ministry is obliged to enforce permit's terms and conditions).

<sup>269</sup> See, e.g., *Quinsam Coal Corp. v. B.C. (Min. of Env't, Lands and Parks)*, Appeal No. 98-WAS-07 (B.C.E.A.B. June 30, 1998) (QUICKLAW) (interpreting application of recently promulgated amendments respecting coarse coal refuse under WMA conditional exemption regulations where permit issued under provincial mines legislation).

<sup>270</sup> See, e.g. *R. v. Seraphim* (1997), 23 C.E.L.R. (N.S.) 87 (B.C.C.A.) (definition of effluent in WMA requires Crown to demonstrate actual harm to environment and even WMA as amended since time of offence that was subject matter of this case may require the capability of something actually present being injured). See also *R. v. Alcan Smelters & Chemicals Ltd.* (1998), 26 C.E.L.R. (N.S.) 220 (B.C.S.C.) (Crown failing to demonstrate actual harm to environment or capability of causing harm). These cases suggest potentially greater difficulty in obtaining convictions under the WMA than under the federal Fisheries Act because a charge of depositing a deleterious substance under the Fisheries Act does not require proof by the Crown of specific damage to fish in the environment. *Id.* at 225. Also in Ontario under the OWRA the Crown only need demonstrate that the pollution may impair water quality to obtain a conviction. It does not need to prove that the discharge did in fact impair water quality. R.S.O. 1990, c. O.40, s. 30(1), as am.

<sup>271</sup> See, e.g., CAN. COUNCIL OF MINISTERS OF THE ENV'T, GUIDANCE DOCUMENT ON THE MANAGEMENT OF CONTAMINATED SITES IN CAN. 1 (1997).

<sup>272</sup> R.S.B.C. 1996 (Supp.), c. 482.

<sup>273</sup> *Id.*, s. 26.1(4) (new or revised permit or stop work notice requiring site profile).

<sup>274</sup> *Id.*, s. 26.2.

<sup>275</sup> *Id.*, s. 27.1.

<sup>276</sup> *Id.*, s. 27.6.

<sup>277</sup> *Id.*, s. 28.4.

WMA<sup>278</sup> specifically designate categories of mining and metal smelting industries that are subject to the contaminated sites requirements,<sup>279</sup> provide for exemptions to the regulations,<sup>280</sup> set out soil and water standards for various listed substances,<sup>281</sup> and set the fees payable to the government for determining the status of contaminated properties.<sup>282</sup> While the contaminated sites program is quite extensive, the regulations exempt coal, metal and placer mines that produce less than 10,000 tonnes of ore annually,<sup>283</sup> or any site that was remediated prior to April 1997 to standards that in the opinion of MELP substantially satisfy the remediation standards of the contaminated sites regulation.<sup>284</sup>

The third aspect of the WMA that is relevant to mining activities is that placer mining waste control regulations<sup>285</sup> exempt such mining operations from the requirement to hold a permit or approval under the WMA if the discharges are from hand panning for gold, testing for the presence of placer minerals in a particular way, or mining production that does not use mercury or chemicals and the mine is located on certain listed creeks.<sup>286</sup>

Environmental regulation of mining activities in British Columbia has taken both similar and novel approaches compared to Ontario. The focus on control and remediation of contaminated sites is a major innovative measure that is covered in a less comprehensive way in Ontario. At the same time, whether the exemption for smaller scale mining activities producing less than 10,000 tonnes of ore annually will constitute a significant gap in the coverage of the B.C. program remains to be seen. Finally, WMA departures from the statutory prohibitions contained in Ontario and federal law may pose significant enforcement problems in future in B.C., unless addressed by the legislature.

## 2. Mining Exploration, Development, Reclamation, and Rehabilitation Controls

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<sup>278</sup> Contaminated Sites Regulation, B.C. Reg. 375/96 (1996).

<sup>279</sup> *Id.*, Sch. 2, Col. 1, Item C (metal smelting, processing, or finishing industries) and Item D (mining, milling, or related industries such as asbestos, coal, lignite, or nonferrous metal mining or milling activities).

<sup>280</sup> *Id.*, s. 4(1)(c)(exemption from site profile requirement where mine subject to reclamation permit under Mines Act, provided that the person has no reason to believe that there is contamination at the site that is not otherwise addressed in the reclamation permit).

<sup>281</sup> *Id.*, Sch. 4-5 (soil standards), Sch. 6 (water standards). Substances under these schedules include inorganic substances such as antimony, beryllium, cobalt, cyanide, mercury, nickel, silver, thallium, tin, arsenic, cadmium, copper, lead, uranium, iron, and zinc.

<sup>282</sup> *Id.*, Table 2.

<sup>283</sup> *Id.*, s. 4(10).

<sup>284</sup> *Id.*, s. 4(2).

<sup>285</sup> Placer Mining Waste Control Regulations, B.C. Reg. 107/89 (1989).

<sup>286</sup> *Id.*, ss. 2-3.

In addition to controls arising from environmental protection legislation, mining laws in Canada also may provide a basis for implementing some environmentally protective measures in relation to mining operations at the exploration, development, reclamation, and rehabilitation stages. There are a variety of federal and provincial mining laws that may allow governments to impose environmentally protective measures on mining operations, or allow governments to withdraw certain state owned lands from mining activity.<sup>287</sup> Because of the division of powers under the Canadian Constitution, the provinces are vested with the lion's share of jurisdiction in relation to Crown lands and resources. The federal government derives most of its authority in this area in relation to uranium and thorium mining and milling activities, which have been declared by statute to be works for the general advantage of Canada,<sup>288</sup> pursuant to that head of power under the Constitution.<sup>289</sup>

### **a. Federal**

#### **i. Atomic Energy Control Act**

The Atomic Energy Control Act ("AECA")<sup>290</sup> regulates certain prescribed substances relevant to mining, including uranium and thorium. The AECA establishes a Board, the Atomic Energy Control Board ("AECB"), which is authorized to develop regulations respecting mining and prospecting for, and production and refining of, these substances. The Minister of Natural Resources is authorized to acquire prescribed substances and any mines, deposits, claims, or production works in connection therewith. Companies may be incorporated under the Act to engage in such activities, and they are deemed to be agents of the federal government.<sup>291</sup> The AECA is slated to be repealed upon the coming into force of the Nuclear Safety and Control Act, which was enacted by Parliament in 1997.

Pursuant to the authorities set out under the AECA, the federal government has promulgated regulations in relation to uranium and thorium

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<sup>287</sup> See, e.g., Mining Act, R.S.O. 1990, c. M.14, s. 36, as am. (allowing minister to withdraw from prospecting and staking lands, mining rights, or surface rights that are the property of the Crown, and to re-open such lands to those activities). See also BARRY J. BARTON, CANADIAN LAW OF MINING 169-176 (1993) (withdrawal may be authorized for a variety of reasons including protection of infrastructure such as transmission lines, watersheds, to enforce a moratorium while conflicting future land uses are resolved, and to complement parks policies).

<sup>288</sup> Atomic Energy Control Act, R.S.C. 1985, c. A-19, s. 18. This law will soon be replaced by the Nuclear Safety and Control Act, enacted by Parliament in March 1997, which is expected to come into force upon the promulgation of new regulations.

<sup>289</sup> CAN. CONST. (Constitution Act, 1867), s. 92(10)(c).

<sup>290</sup> R.S.C. 1985, c. A-19.

<sup>291</sup> *Id.*, ss. 2, 3, 9, 10, 11.

mining activities.<sup>292</sup> The regulations constitute a complete code of conduct in relation to such activities. Matters covered under the regulations include issuance and revocation of licences and approvals for excavating, removing, siting, constructing, operating, and decommissioning such facilities. Pursuant to each of these activities applicants for a licence must satisfy the AECB that the environment will be protected and must provide appropriate supporting documentation to that effect. The regulations also set out requirements for the production of records and reports and authorize inspection and compliance initiatives by AECB inspectors. Amendments to the regulations, made in 1994, emphasize development, financing, and implementation of decommissioning plans to ensure that the costs of decommissioning uranium mining facilities are borne by industry and not by government.<sup>293</sup> These regulations will soon be replaced by regulations promulgated under the recently enacted Nuclear Safety and Control Act. The requirements of the new regulations will remain largely the same as those under the existing regulations.<sup>294</sup>

Uranium mining and milling projects have long been subject to federal environmental assessment procedures.<sup>295</sup> Since 1995, various provisions of AECA have constituted triggers for the application of CEAA to uranium and thorium mining and milling projects.<sup>296</sup>

## ii. Other Federal Mining Laws

Other federal mining laws focus on either specific geographic locations, such as the Yukon, or specific types of minerals or mining activity, such as quartz or placer.<sup>297</sup> Recent amendments to this type of federal legislation have increased federal authority to ensure that appropriate land use, reclamation, and environmental protection measures are undertaken in connection with such mineral activity.<sup>298</sup>

### ***b. Provincial***

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<sup>292</sup> Uranium and Thorium Mining Regulations, SOR/88-243, as am. (1988).

<sup>293</sup> Uranium and Thorium Mining Regulations Amendment, SOR/94-653 (1994). *See also* 128 Can. Gaz. Part II, 3509 (1994) (regulatory impact analysis statement accompanying amendment to regulation).

<sup>294</sup> Uranium Mines and Mills Regulations, Can. Gaz. Part I, 2689, 2741 (Oct. 10, 1998) (regulatory impact analysis statement and proposed regulations).

<sup>295</sup> *See supra* text accompanying notes 99-100.

<sup>296</sup> CEAA, Law List Regulations, SOR/94-636, s. 6; Exclusion List Regulations, SOR/94-639, ss. 21-30; Comprehensive Study List Regulations, SOR/94-638, s. 19; Inclusion List Regulations, SOR/94-637, ss. 20-24.

<sup>297</sup> *See, e.g.*, Yukon Quartz Mining and Yukon Placer Mining Amendment Act, S.C. 1996, c. 27.

<sup>298</sup> *Id.* *See, e.g.*, part II (land use and reclamation).

Historically, provincial mining laws have shared many of the same characteristics due to the fact that they are based on Crown ownership and exploitation of mineral resources under the Canadian Constitution. Most mining laws set out the manner in which the Crown may dispose of its minerals and others may obtain rights to them.<sup>299</sup> As environmental management concerns in connection with mining activities have increased in recent years,<sup>300</sup> certain stages of mining operations including exploration, reclamation, and rehabilitation have seemed particularly well suited to be regulated under mining laws. However, there is great disparity in the approaches of provincial mining laws to these issues ranging from the application of sustainable development principles to application of environmental assessment requirements, to traditional mine exploration, development, and reclamation regimes, to outright deregulation to accommodate mining interests. Examples of these approaches are reviewed below.

#### **i. British Columbia**

The Mines Act<sup>301</sup> imposes permit requirements and authorizes permit exemptions for those proposing to establish mines in the province. As a condition of permit issuance, the chief mine inspector may require security to ensure mine reclamation and to provide for protection and mitigation of damage to watercourses affected by the mine. The Act also authorizes the establishment of a mine reclamation fund to ensure sufficient revenue to provide for reclamation after a mine has ceased operating. The fund was established by regulation in 1994.<sup>302</sup> The Act also authorizes establishment of a Health, Safety, and Reclamation Code. The Code, in force since 1952, sets reclamation standards for major coal and hard rock mineral mines, including requirements for the return of land and watercourses to productive use, clean-up, revegetation, the safe disposal or impoundment of waste, and the minimization of acid mine drainage.<sup>303</sup>

In an apparent trend in the opposite direction in British Columbia, however, in early 1998, the province enacted the Mining Rights Amendment Act, 1998,<sup>304</sup> which came into force in early 1999. This statute changes mining law in the province in two respects. First, it establishes a right of access for holders of mineral claims to all areas outside of parks. Second, it establishes a right to compensation to holders of mineral tenure where there is expropriation of that tenure right by a government to establish a park. These changes have been

<sup>299</sup> BARTON, *supra* note 287, at 1.

<sup>300</sup> STATE OF CANADA'S ENV'T, *supra* note 5, at 11-56, 11-65.

<sup>301</sup> R.S.B.C. 1996, c. 293.

<sup>302</sup> Mine Reclamation Fund Regulation, B.C. Reg. 287/94 (1994).

<sup>303</sup> GREG SIMMONS, SIERRA LEGAL DEFENCE FUND, ENVTL. REGULATION OF MINING: HISTORICAL OVERVIEW NOTES 1, 5-6 (1997).

<sup>304</sup> S.B.C. 1998, c. \_\_\_.

supported by the mining industry but have dismayed the environmental community.

## ii. Saskatchewan

The Crown Minerals Act<sup>305</sup> requires the responsible 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.<sup>306</sup> Upon cancellation, the former holders of the Crown disposition are entitled to compensation,<sup>307</sup> but no other remedy against the Crown.<sup>308</sup> These provisions have been described as linking the management of minerals with management of the environment.<sup>309</sup>

## iii. Manitoba

The Mines and Minerals Act<sup>310</sup> 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 the principles of sustainable development.<sup>311</sup> The Act further defines sustainable development principles to include: (1) integration of decisions respecting the economy and mining with environmental protection; (2) economic development and environmental preservation for the benefit of present and future generations; (3) prevention or minimization of environmental hazards from mineral development by avoiding policies, programs, and decisions that have significant adverse environmental or economic impact; (4) application of conservation policies and practices that enable mineral extraction to proceed in an environmentally and economically wise manner; (5) recycling of mining waste by-products to enable re-use, reduction, or recovery of the by-products; and (6) rehabilitation of lands damaged by mining activity.<sup>312</sup> Other provisions of the Act authorize the establishment of a mine rehabilitation fund,<sup>313</sup> and the promulgation of rehabilitation regulations to ensure environmental protection.<sup>314</sup>

## iv. Ontario

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<sup>305</sup> S.S. 1984-85-86, c. C-50.2.

<sup>306</sup> *Id.*, s. 10.1(2).

<sup>307</sup> *Id.*, s. 10.1(3).

<sup>308</sup> *Id.*, s. 10.1 (5)(6).

<sup>309</sup> BARTON, *supra* note 287, at 21.

<sup>310</sup> S.M. 1991-92, c. 9.

<sup>311</sup> *Id.*, s. 2(1).

<sup>312</sup> *Id.*, s. 2(2).

<sup>313</sup> *Id.*, s. 195.

<sup>314</sup> *Id.*, s. 230(ee).

The purpose of the Mining Act<sup>315</sup> 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 Ontario.<sup>316</sup> Provisions of the Act have been used to protect the environment from mining activities from time to time through administrative mechanisms and the courts.<sup>317</sup> Despite the dual purpose of the Act, amendments to the law in an omnibus bill enacted in 1996, have been characterized as “gutting” the Act’s provisions relating to the closure and rehabilitation of mines in the province.<sup>318</sup> In particular, the amendments: (1) weakened the Act’s provisions for provincial approval of mine closure plans; (2) eliminated the requirement that mining companies post financial securities to ensure that if they go bankrupt the taxpayer does not have to pay for the mine closure; (3) exempted the financial assurances for mine closures provided by mining companies from freedom of information requests; (4) removed the requirements from mining companies to deliver to the province annual reports on implementation of closure plans; and (5) exempted companies who surrender mining leases within twelve months of the amendments from liability for pre-existing mine hazards.<sup>319</sup>

#### v. 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, and 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” framework.<sup>320</sup>

### C. The Role of the Public

<sup>315</sup> R.S.O. 1990, c. M.14, as am.

<sup>316</sup> *Id.*, s. 2.

<sup>317</sup> See, e.g., *Conwest Exploration Co. v. Ont. (Director of Mine Rehabilitation)* (1996), 20 C.E.L.R. (N.S.) 208 (Ont. Div. Ct.) (mining commissioner ruling upheld on appeal that mineral rights included right to extract minerals from tailings on the surface of lands and therefore carried correlative obligation under section 139 of Act – respecting requirement at the time to submit a closure plan to rehabilitate abandoned mine site – to take steps to protect environment from effects of the tailings).

<sup>318</sup> CANADIAN INST. FOR ENVTL. L. AND POL’Y, ONTARIO’S ENV’T AND THE “COMMON SENSE REVOLUTION” 106 (1997).

<sup>319</sup> *Id.* at 106-107.

<sup>320</sup> Paul R. Grande & Odette Nadon, *The Mining Industry and the Restoration of the Environment in Quebec*, 18 C.E.L.R. (N.S.) 197 (1996).

In addition to constitutional, common law, or civil law proceedings, the Canadian public also may have the opportunity to invoke statutory provisions under federal and provincial legislation to permit them to participate in the administrative decision making process, or to seek redress in the courts concerning the environmental effects of mining activities. These citizen initiated options include the following: (1) public participation in the administrative process; (2) requests for investigation of potential violations of the law; (3) statutory causes of action; and (4) class actions or proceedings. Each option is briefly reviewed below.

## 1. Public Participation in the Administrative Process

Most federal and provincial environmental laws now provide the opportunity for the public to be given notice of proposed regulations and the option of commenting on them before they become finalized.<sup>321</sup> Rare, however, is the opportunity to challenge in court the adequacy of the final regulation produced.

The public also may be able to participate in administrative hearings on mining projects. This potential exists, for example, under federal and provincial environmental assessment legislation. In practice, environmental assessment hearings under CEAA are very narrowly circumscribed, and hearings at the provincial level have been very rare.<sup>322</sup>

More recently, Parliament and provincial legislatures have authorized the use of mediation, or other methods of alternative dispute resolution.<sup>323</sup> In practice, these methods have rarely been invoked by governments or the parties.

What often is a necessary adjunct or pre-condition to the success of notice and comment, administrative hearings, or alternative methods of dispute resolution, such as mediation, is funding for those members of the public who cannot otherwise afford to participate in the process. In practice, where funding has been legislatively authorized governments have permitted these regimes to sunset,<sup>324</sup> or have under-funded the participants.

## 2. Requests for Investigations

<sup>321</sup> See, e.g., Environmental Bill of Rights ("EBR"), S.O. 1993, c.28, part II (authorizing notice and comment opportunities for statutes, regulations, instruments, and policies).

<sup>322</sup> See *supra* part V.A.2 and V.A.3.

<sup>323</sup> See, e.g., CEAA, R.S.C. 1985, c. C-15.2, s. 29 (mediation as alternative to referral to panel for review); and OEAA, R.S.O. 1990, c. E.18, s. 8, as am. (mediation option available to resolve dispute in connection with proposed undertaking).

<sup>324</sup> Castrilli, *supra* note 48, at 366 n.54.

It always has been open to a member of the public to complain to government about possible violations of the law. In recent environmental legislation at both the federal<sup>325</sup> and provincial<sup>326</sup> levels this opportunity has been given formal legislative sanction. In practice, perhaps because of the more formal obligations that have been placed on members of the public who wish to use this procedure,<sup>327</sup> there have not been many instances of public use of these mechanisms.<sup>328</sup>

### 3. Statutory Causes of Action

Recent legislation at the provincial level has given members of the public the statutory entitlement to use the courts to protect the environment and public resources. In Ontario, the provisions have been in existence for almost five years but invoked rarely.<sup>329</sup> In other jurisdictions, such as Quebec, the provisions have been used on occasion.<sup>330</sup> The prohibitive expense of civil litigation, the lack of authority to seek damages, and the procedural impediments in using the new cause of action under the EBR, partially may explain the infrequent use of these provisions.

### 4. Class Actions or Proceedings

In conjunction with broader statutory entitlement for individuals to protect the environment, some legislatures also have enacted legislation authorizing class actions for mass harm done to individuals or the environment. In Ontario,

<sup>325</sup> CEPA, R.S.C. 1985, c. 16, s. 108 (4<sup>th</sup> Supp.) (allowing any two Canadian residents over the age of 18 who are of the opinion that an offence has been committed to apply to the Minister for an investigation of the alleged offence and requiring a response within a specified time period).

<sup>326</sup> EBR, S.O. 1993, c. 28, part V (application for investigation by any two Ontario residents who believe a prescribed statute, regulation, or instrument has been contravened).

<sup>327</sup> *Id.*, s. 74 (setting out material to be included in application and provision of sworn statement of belief as to the truth of the facts alleged).

<sup>328</sup> ENVIRONMENTAL COMM'R OF ONT., OPEN DOORS – ONTARIO'S ENVTL. BILL OF RIGHTS: 1997 ANNUAL REPORT 62 (1998) [hereinafter OPEN DOORS] (during 1997 sixteen requests for investigation handled including some that had been submitted in previous years).

<sup>329</sup> EBR, S.O. 1993, c. 28, part VI (right of any person to sue for imminent contravention of law which causes or will imminently cause significant harm to a public resource). For the fourth year in a row (1994-1997) the new EBR cause of action was not invoked in the Ontario courts. OPEN DOORS, *supra* note 327, at 75. In late 1998, the first harm to a public resource suit under the EBR was brought respecting an illegal waste dump. *First Harm to Public Resource Lawsuit Under the EBR*, EBRIGHTS, Winter 1998/9, at 7.

<sup>330</sup> Environmental Quality Act ("EQA"), R.S.Q. 1993, c. Q-2, s. 19.1 to 19.7 (authorizing any person resident in Quebec to apply for an injunction to protect the environment where there has been a contravention of the EQA, regulations, orders, or approvals under the EQA). See also Giroux, *supra* note 59, at 137-139 (examples of injunctions issued and damages awarded under the EQA).

use of class proceedings law<sup>331</sup> would have to be invoked in conjunction with the province's reformed law of standing in public nuisance.<sup>332</sup> In Quebec, class actions are authorized and have been brought in environmental matters.<sup>333</sup>

## VI. EMERGING INITIATIVES RELATING TO ENVIRONMENTAL REGULATION OF MINING ACTIVITIES

This update has referred to emerging initiatives in Canada that are relevant to the issue of environmental regulation of mining activities. The purpose of this part of the update is not to repeat the above review, but to summarize some of these initiatives and refer to certain other initiatives not previously discussed.

### A. Bilateral and Trilateral Arrangements

Canada is a party to a number of bilateral and trilateral arrangements in North America that have the potential to apply to transboundary as well as domestic effects of mining activities. Two of these international arrangements are discussed below.

Under the 1909 Boundary Waters Treaty,<sup>334</sup> Canada and the United States are obligated to ensure that the boundary waters and the waters flowing across the boundary are not polluted on either side to the injury of health or property on the other.<sup>335</sup> The Treaty also establishes a bilateral body, the International Joint Commission ("IJC"), and permits Canada and the United States to refer to the IJC for examination and report, disputes respecting these waters.<sup>336</sup> In late 1998, the United States officially requested that the opening of a new mine in British Columbia, near the Alaska border, be referred to the IJC. The governments of the United States and Alaska are concerned that the mine will pollute a river that flows from British Columbia into Alaska, that is an important salmon habitat and fishery. The project was initially approved under the BCEAA.<sup>337</sup>

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<sup>331</sup> Class Proceedings Act, S.O. 1992, c. C.6.

<sup>332</sup> EBR, S.O. 1993, c. 28, s. 103 (reforming law of standing to sue in public nuisance). The EBR does not permit a section 84 action – for violation of statute causing significant harm to a public resource – to be brought by way of a class proceeding but does not prevent an action in public nuisance from being brought as a class proceeding. *Id.*, ss. 84(7), 103.

<sup>333</sup> Giroux, *supra* note 59, at 135-136.

<sup>334</sup> (1909), 36 Stat. 2448.

<sup>335</sup> *Id.*, art. IV.

<sup>336</sup> *Id.*, art. IX. IJC reports under art. IX are not regarded as decisions, nor do they have the character of arbitral awards.

<sup>337</sup> *U.S. asks for referral on mine*, Globe and Mail, Sept. 4, 1998. (Tulsequah Chief Mine).

Under the North American Agreement on Environmental Cooperation (“NAAEC”),<sup>338</sup> Canada, Mexico, and the United States are required to ensure that their respective laws and regulations provide for high levels of environmental protection.<sup>339</sup> NAAEC permits a non-governmental organization to make a submission to the Secretariat, established under NAAEC, that a party to the agreement is “failing to effectively enforce its environmental law.”<sup>340</sup> In addition, any party may request consultations with another party to the NAAEC regarding whether there has been a persistent pattern of failure by the other party to effectively enforce its environmental law.<sup>341</sup> Where consultations do not resolve the matter, an arbitral panel may be convened on a two-thirds vote of the parties. If the panel agrees that there has been a persistent pattern of failure by the party, the disputing parties may agree on a mutually satisfactory action plan. Where an action plan cannot be agreed upon, the panel may be reconvened and, where warranted, impose a monetary enforcement assessment against the offending party. In late summer 1998, an environmental group requested the Secretariat to consider whether Canada was failing to enforce the Fisheries Act with respect to three mines in British Columbia.<sup>342</sup>

From the above brief review of bilateral and trilateral arrangements to which Canada is a signatory, it is apparent that such mechanisms are important emerging initiatives to, and supplements of, domestic requirements applicable to mining activities.

## B. Federal

The initiatives emerging at the federal level that may influence mining activities, directly or indirectly, include: (1) the CEAA five-year review;<sup>343</sup> (2) CEAA guidelines regarding mining activities;<sup>344</sup> (3) potential CEPA amendments that may eventually result in more substances important to the mining industry being designated as toxic and therefore subject to regulation;<sup>345</sup> (4) potential enactment of a Canada Endangered Species Protection Act, which could restrict

<sup>338</sup> 32 I.L.M. 1480 (1993) (in force Jan.1, 1994). This agreement is sometimes referred to as the “environmental side agreement” to the North American Free Trade Agreement (“NAFTA”).

<sup>339</sup> *Id.*, art 3.

<sup>340</sup> *Id.*, art 14. The Secretariat may request the NAAEC Council to permit the Secretariat to develop a factual record respecting the matter. *Id.*, art.15.

<sup>341</sup> *Id.*, art. 22.

<sup>342</sup> *Eco-fund fingers Ottawa for mine woes*, The Vancouver Province, July 8, 1998, at A18.

<sup>343</sup> R.S.C. 1985, c. C-15.2, s. 72 (review of CEAA to be conducted by Minister within five years of Act coming into force). The review will be due in the year 2000.

<sup>344</sup> See *supra* text accompanying note 136.

<sup>345</sup> See Bill C-32, *Canadian Environmental Protection Act, 1998*, 36<sup>th</sup> Parl., 1<sup>st</sup> Sess., 46-47 Eliz. II, part 5 (first reading Mar. 12, 1998, House of Commons) (control of toxic substances). Complex set of amendments proposed that may have the effect of increasing the number of substances designated as toxic under the statute. See *supra* part V.B.1.a.i.(priority substances including nickel, arsenic, and cadmium reviewed under existing statute may eventually be designated “CEPA-toxic”).

mining development primarily on federal lands, when species are designated as endangered or threatened and proposed to be protected through recovery plans;<sup>346</sup> (5) potential amendments to the federal Fisheries Act that would permit delegation to the provinces of fish management protection and have a potential effect on section 35(2) authorizations as triggers for the application of CEAA;<sup>347</sup> (6) streamlining of federal regulations under the Fisheries Act pertaining to metal mining liquid effluents, which could result in either the strengthening or weakening of those regulations;<sup>348</sup> (7) enactment of the Mackenzie Valley Resource Management Act, which will have the effect of exempting the application of CEAA in that part of the western Arctic;<sup>349</sup> and (8) the trend toward increased judicial scrutiny of the application of CEAA at the screening and panel review stages.<sup>350</sup>

### C. Provincial

Emerging initiatives at the provincial level also may be positive or negative as they relate to regulation of mining activities. These include: (1) deregulation efforts in Ontario under the Mining Act that could adversely effect future reclamation and rehabilitation measures;<sup>351</sup> (2) attempts to blend sustainable development and environmental assessment principles in mining legislation in several of the prairie provinces;<sup>352</sup> (3) development of stringent new provisions on reclamation and rehabilitation in British Columbia and Quebec;<sup>353</sup> (4) application of contaminated sites requirements in British Columbia;<sup>354</sup> (5) judicial recognition of the importance of applying environmental assessment legislation to the exploration stage of mining activities.<sup>355</sup>

### D. Federal-Provincial

Among the more important federal-provincial initiatives include: (1) harmonization efforts with respect to environmental assessment, inspections, and related activities that could result in the downloading of federal responsibilities to the provinces and the withdrawal of federal involvement in

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<sup>346</sup> See Bill C-65, *Canada Endangered Species Protection Act*, 35<sup>th</sup> Parl., 2<sup>nd</sup> Sess., 45 Eliz. II, s. 3(2), 30-32, 42 (first reading Dec. 1996, House of Commons). Died on the Order Paper with 1997 federal election and has not been re-introduced to date.

<sup>347</sup> See *supra* notes 223-227 and accompanying text.

<sup>348</sup> See *supra* notes 211-222 and accompanying text.

<sup>349</sup> See *supra* part V.A.2.d.

<sup>350</sup> See *supra* part V.A.2.c.

<sup>351</sup> See *supra* part V.B.2.b.4.

<sup>352</sup> See *supra* part V.B.2.b.2.3.

<sup>353</sup> See *supra* part V.B.2.b.1.5.

<sup>354</sup> See *supra* part V.B.1.b.ii.

<sup>355</sup> See *supra* note 140.

environmental control efforts to an extent difficult to determine at this stage;<sup>356</sup> and (2) joint efforts to examine the effects of mining activity on the environment, such as acid mine drainage.<sup>357</sup>

### E. Voluntary Initiatives by the Mining Industry

In conjunction with deregulation and downloading efforts by government, there has been a corresponding rise in voluntary initiatives by industry, including the mining industry. Indeed, Canada's mining industry is a leading proponent of voluntary measures.<sup>358</sup> One voluntary initiative supported by the mining and smelting industry is the program on Accelerated Reduction/Elimination of Toxic Substances ("ARET").<sup>359</sup> The ARET program purportedly resulted in mining association companies reducing their releases of twelve substances targeted by the ARET program to 2,528 tonnes in 1997, a reduction of nearly 70 percent from the base year releases of 8,110 tonnes, and a slight reduction from 2,790 tonnes in 1996.<sup>360</sup> It is unclear, however, whether the reductions resulted solely from industry voluntary efforts or were caused by economic factors or even by environmental regulation itself. Moreover, the ARET program only addresses emissions reductions, not pollution prevention or toxic use/reduction. Nonetheless, ARET and other voluntary mining industry initiatives are highly regarded by the industry,<sup>361</sup> and bear watching in future.

### F. The Public

Among the emerging initiatives regarding the role of the public in respect of environmental protection generally, including with respect to mining activities, include: (1) gradual improvement in public participation opportunities, though these are hampered by inadequate or non-existent public funding; (2)

<sup>356</sup> Canada-Wide Accord on Env'tl. Harmonization, Jan. 29, 1998 (sub-agreements will include environmental assessment, inspections and standards). The accord states that when a government has accepted obligations and is discharging a role, the other order of government shall not act in that role for the period of time determined by the relevant sub-agreement. *Id.*, art. 5.6.

<sup>357</sup> See *supra* text accompanying note 220 (AQUAMIN). See also GOV'T OF CAN ET AL, MINE ENVIRONMENT NEUTRAL DRAINAGE. This program begun in 1989 and now essentially complete has been responsible for the development of technologies to reduce mining problems from acid mine drainage. Other initiatives of a multi-stakeholder nature (i.e. including the mining industry, and non-government organizations) have attempted to expand problem solving and cooperation in relation to a wider range of mining issues. See, e.g., WHITEHORSE MINING INITIATIVE, A PROGRESS REPORT (1996).

<sup>358</sup> See, e.g., MINING ASSOCIATION OF CANADA, VOLUNTARY EMISSIONS REDUCTION 1 (1996).

<sup>359</sup> ARET was initiated in 1994 by a multi-stakeholder group federal and provincial governments, industry, and health professions. MINING ASSOCIATION OF CANADA, ENVTL. PROGRESS REPORT 14 (1998).

<sup>360</sup> *Id.* at 14-15.

<sup>361</sup> *Id.* at 2.

opportunities to request investigation of potential violations of the law, though these are still infrequently used because of their great formality; (3) statutory causes of action, though these too have been rarely used to date; (4) class actions or proceedings, which have been used more frequently in Quebec, than in common law provinces, such as Ontario; and (5) initiatives in international forums, such as under the NAAEC, where submissions by non-government organizations have been made about whether Canada is enforcing federal environmental laws respecting mining activities.

## VII. CONCLUSIONS

This update has examined the instruments available for environmental regulation of mining activities in Canada arising from constitutional, common law or civil law traditions, or from environmental planning or regulatory regimes. The particulars of these mechanisms require careful study in order to draw proper conclusions about their adequacy in meeting national, provincial, or local goals of environmental protection or how they are to be balanced with other social, economic, or cultural considerations.

There is no constitutional right to a clean environment in Canada. The closest analogue to a constitutionalized environmental right in Canada relates to the aboriginal right to take food that could be used to protect hunting, trapping, and gathering from mining activities.<sup>362</sup> The division of powers under the Canadian Constitution appears to grant the lion's share of the jurisdiction for dealing with mining activity to the provinces. However, federal jurisdiction is not insignificant in this area due to the criminal law power, the power to regulate seacoast and inland fisheries, and the peace, order and good government power. The Charter of Rights and Freedoms, as an additional source of authority to protect the environment, has largely unrealized potential at this time.

Environmental planning and impact assessment regimes present possibilities for improving regulatory management of, and introducing principles of sustainable development with respect to, mining activity. However, these regimes also present significant problems as they have been applied at the federal and provincial levels in Canada. Indeed, Canada's regime of environmental assessment has had a long, complex, and frustrating history. In its current form, CEAA is not a model to emulate. CEAA is too narrowly focused on physical works and not on broader program or policy decision making that could make the law more of a long-term regional planning tool. Proponent self-

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<sup>362</sup> The group rights of aboriginal peoples, such as hunting, fishing, and trapping rights, may be raised to the level of constitutional rights to the extent that the Canadian Constitution recognizes and affirms "the existing aboriginal and treaty rights of the aboriginal peoples of Canada." CAN. CONST. (Constitution Act, 1982), pt. I, s. 35. See also Randy Kapashesit & Murray Klippenstein, *Aboriginal Group Rights and Environmental Protection*, 36 MCGILL L.J. 925, 955 (1991).

assessment dominates the CEEA process. The responsible authority under CEEA, who often also is the proponent of the project, may still ignore the results and recommendations of expert review panels, assuming the project gets passed a flawed initial screening process. CEEA locks the public out of the enforcement process, and largely locks the public out of the hearing process due to a lack of procedural protections. Provincial environmental assessment laws hold out greater promise for public involvement, but the promise has not been met in the context of mining projects. The encouraging aspect of Canadian environmental assessment law is that due to long experience with the existing process, there is a good sense of what reforms could be introduced to improve the performance of such laws. A key ingredient that is referred to in most environmental assessment laws but not applied in practice is that such regimes should examine need, alternatives to, and alternative methods of carrying out projects. The problem is a failure to ensure that decision makers act on the findings. Examination of alternatives is what distinguishes environmental assessment law from other types of environmental legislation. What is apparent in the Canadian experience, however, is that governments pay too little attention to the concept in practice, if not attempt to circumvent the requirement altogether. Reform of environmental assessment requirements will need to focus on, among other things, keeping the issue of examination of a broad range of alternatives at the core of, not at the periphery of, the process, and developing a principled basis for decision making.

Canadian regulatory legislation at the federal and provincial levels addressing environmental protection and mining management controls, form a complex series of complementary and, in some cases, contradictory environmental requirements. Traditional pollution control legislation at the federal level is highly focused on a few substances of concern to the mining industry. Federal recognition of the need to control more substances has not been translated into swift action in implementing new requirements. Indeed, industry and government, concerned about the impact of existing requirements on the mining industry, have sought opportunities to “streamline” these laws, initiatives that are regarded with suspicion by the national environmental community. Provincial environmental laws have, in some instances, been bolder and more comprehensive than their federal counterparts. Some provinces have introduced industry sector wide regulations that cover more contaminant types and contain potentially stricter requirements than federal law. Provinces also have introduced contaminated sites requirements that largely have no parallel at the federal level.

Canadian mining law requirements for reclamation and rehabilitation are largely to be found at the provincial level, with a key exception to this being in relation to federal requirements for uranium mining activities. Several provinces, as well as the federal government where, for example, uranium mining is concerned, have adopted reclamation fund requirements because of concerns that the costs of decommissioning such facilities not be borne by the taxpayer.

To varying degrees federal and provincial laws demonstrate an emerging recognition of the role the public can play in the process of approval of major new mining projects, as well as with respect to opportunities for court enforcement of environmental requirements in relation to such activities. The recognition, however, while welcome is still in its infancy in practice. Governments have not yet matched the recognition that the ordinary member of the public has a role to play, with the provision of resources that would permit the public to take up that role in practice.

Finally, it is worth noting that because much mining activity occurs on public land in Canada, there is a need to think about mining activity in the wider context of the private use of public resources. While beyond the scope of this update, writers are beginning to develop the analytical basis for proposing a new paradigm of public land management law that integrates ecosystem management and sustainable development principles with land use planning.<sup>363</sup> Such concerns, if not approaches, have the potential to mesh favourably with many of the issues raised in this paper regarding environmental regulation of the mining industry in Canada.

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<sup>363</sup> See, e.g., Steven A. Kennett, *New Directions for Public Land Law*, 8 J. ENVTL. L. & PRAC. 1 (1998).