

A large industrial facility, possibly a refinery or chemical plant, is silhouetted against a bright, hazy sunset sky. The structures are dark and complex, with various towers, pipes, and scaffolding visible. The overall tone is warm and dramatic.

ecojustice

Setting a Gold Standard

Reforming Quebec's Mining Act



SETTING A GOLD STANDARD:
REFORMING QUEBEC'S MINING ACT

October 2009

William Amos, Anne Audoin and Ugo Lapointe, with André Morin, Sylvain Archambault, Mélanie Pouliot, Noah Arshinoff and all the members of the coalition *Pour que le Québec ait meilleure mine!*

Disponible en français.

ecojustice

formerly Sierra Legal Defence Fund

TORONTO OFFICE

30 St. Patrick Street, Suite 900 Toronto, ON M5T 3A3

Phone: (416) 368-7533 | Fax: (416) 363-2746

E-mail: toronto@ecojustice.ca

VANCOUVER OFFICE

131 Water Street, Suite 214, Vancouver, BC V6B 4M3

Toll Free: 1-800-926-7744 | Phone: (604) 685-5618

Fax: (604) 685-7813

E-mail: info@ecojustice.ca

OTTAWA ENVIRONMENTAL LAW CLINIC

University of Ottawa, Faculty of Law

35 Copernicus Street, Office 107

Ottawa, ON K1N 6N5

Phone: (613) 562-5800 ext. 3382 | Fax: (613) 562 5319

E-mail: ottawa@ecojustice.ca

PREFACE

For a number of years, a variety of stakeholders as well as private citizens have repeatedly critiqued major aspects of the Quebec *Mining Act*. With the announcement that the Government of Quebec will be tabling amendments to this law in November 2009, it is more important than ever for civil society groups to comprehensively evaluate the *Mining Act*. Only by changing this law can Quebec ensure the transition into a sustainable mining industry in Quebec.

Between 2007 and 2009, the Minister of Natural Resources and Wildlife, on behalf of the government of Quebec, undertook a brief public consultation process that led to the *Mineral Strategy of Quebec*. A number of participants expressed frustration with this process, indicating that it was inadequate and did not achieve sufficient depth to properly respond to the expectations and values of Quebec society today.¹ Therefore, since 2007, the criticism aimed at the *Mining Act* has steadily increased with particularly strong and pressing calls for reform over the past year. This year the Auditor General of Quebec added his voice to others that have advocated for an overhaul of the *Mining Act*.² The Auditor General's report issued in April 2009 confirmed the existence of major gaps in Quebec mining legislation that, given all the evidence, cannot go unchanged. While past governments have been reticent to undertake a serious reform, the government must now address those aspects of the law that are, in this day and age, completely unacceptable to a growing number of Quebecers.

A variety of issues have surfaced recently that have highlighted the gaps and inequities within the *Mining Act*, its regulations and related statutes. These include: a renewed focus on low grade gold exploitation, uncertainty and concern surrounding uranium exploration projects, the proposal of open pit mining operations adjacent to established communities and sensitive ecosystems, and the overall increase in the number of exploration and exploitation projects in Quebec. These developments in the mining sector have served to highlight the ecologically unsustainable aspects of the current law.

For Ecojustice and its partners in the "Pour que le Quebec ait meilleure mine!" coalition, it became apparent that the *Mining Act* requires particular scrutiny to evaluate how it establishes an unsustainable mining regime in Quebec. With the assistance of its coalition partners, the uOttawa-Ecojustice Environmental Law Clinic has proposed a series of necessary reforms that seek an equilibrium between the rights of individuals, communities, First Nations, and the mining industry, with a view to achieving sustainable development and environmental protection. In sum, we recommend amendments to the *Mining Act* that respect the principles and values that guide other laws in Quebec and that respond to the expectations of Quebec society.

¹ See : www.naturequebec.org/ressources/fichiers/Communications/CO09-06-25_Mines.pdf, and www.naturequebec.org/ressources/fichiers/Energie_climat/CO09-07-03_StrategieMinerale.pdf

² Quebec's Auditor General, [Annual Report 2008-2009-Tomell](#), 2009, p. 2-1 to 2-40.

TABLE OF CONTENTS

I- INTRODUCTION

<i>Objectives</i>	1
<i>Background</i>	2
<i>Shortcomings of the Mining Act</i>	3

II- PROPOSED AMENDMENTS

1. PROTECTING THE RIGHTS OF INDIVIDUALS AND COMMUNITIES	6
<i>Establishing a genuine consultative democracy prior to mineral exploration and exploitation activities – access to information, consultation and consent</i>	
2. ENHANCING ENVIRONMENTAL PROTECTION	11
<i>Making environmental impact assessments obligatory for all new mines and for some advanced exploration projects</i>	
3. SUSTAINABLE LAND USE PLANNING	17
<i>Eliminating the primacy of mining rights over protected areas and reinforcing municipal land-use planning powers</i>	
4. APPLYING THE POLLUTER PAYS PRINCIPLE	22
<i>Requiring solid financial guarantees to ensure complete rehabilitation and naturalization of all affected mining sites, including open pit mining sites</i>	
5. BANNING URANIUM EXPLORATION AND MINING IN QUEBEC	28

I- INTRODUCTION³

Objectives

The goal of this report is to propose to the government of Quebec a comprehensive reform of the current *Mining Act* and its associated regulations (hereinafter the “*Mining Act*” or “the *Act*”).⁴ The *Act* contains a number of weaknesses and incoherencies that will be enumerated and analysed throughout this report. The *Mining Act* has created unnecessary conflicts and negative impacts on local and regional stakeholders in Quebec, private property owners, as well as First Nations communities. More broadly speaking, these conflicts and negative impacts are affecting the general public and the mining industry itself. Throughout this analysis, emphasis will be placed on the need to transform the *Mining Act* into a legal regime that respects the rights of Quebecers and guarantees the conservation of a sustainable environment.

To this end, we reference a number of related laws and regulations, notably the *Sustainable Development Act*. The principles expressed in this law should underlie the realisation of all mining projects. However, as we demonstrate below, the *Mining Act* respects neither the obligation to protect the environment⁵ nor the need to ensure informed citizen participation and engagement⁶ as provided under the *Sustainable Development Act*.

The reforms we propose seek to balance the privileged operating conditions that the mining industry currently enjoys with the implementation of a more democratic and informed process of consultation and the achievement of higher standards of environmental protection.

In addition to various conflicts with the *Sustainable Development Act*, a number of provisions in the *Mining Act* run counter to specific legal duties pursuant to the *Quebec Civil Code*⁷, the *Environment Quality Act*, the *Quebec Charter of Human Rights and Freedoms*⁸ and even the *Canadian Charter of Rights and Freedoms*.⁹ This report, therefore, will examine the *Mining Act* in its broader legal context.

³ Note that this document is translated from an original French version, whose content shall always prevail.

⁴ *Mining Act* (L.R.Q., chapter M-13.1). This study primarily focuses on the regulation of the metal mining industry. Issues of government taxes and royalties are not addressed in this study.

⁵ *Sustainable Development Act*, article 6 (c) ; R.S.Q. c. D-8.1.1

⁶ *Sustainable Development Act*, article 6 (e)

⁷ Articles 947, 952, *Civil Code of Quebec*

⁸ Articles 6, 7 and 8, *Charter of human rights and freedoms*, R.S.Q. c. C-12

⁹ Article 7, *Charter of Rights and Freedoms*; *The Constitution Act, 1982*, being Schedule B to the Canada Act 1982 (U.K.), 1982, c. 11, coming into force 17 April 1982.

Background

The first generalized statute concerning mining in this province was the *Quebec General Mining Act of 1880*.¹⁰ A subsequent law in 1901 introduced minor amendments, but it wasn't until the 1960's that any significant reforms were made to Quebec's mining regime. The current *Act* was enacted in 1987¹¹, and since then there have been a few important reforms, notably in 1995 when requirements for restoration plans and financial guarantees covering 70% of the predicted restoration costs were imposed. However, as the Auditor General of Quebec's report in April 2009 suggests, these restoration and financial guarantee provisions have been applied unevenly.¹² Further reforms were introduced in 2000 which introduced the concept of online staking of mineral claims,¹³ facilitating access to land and resources without imposing any corresponding duty of notification and consultation.

At present, all preliminary mining activity in Quebec is subject to the 19th century principle of "free entry", which prioritizes the interests of mining companies over the rights of Aboriginal peoples, as well as the interests of property owners and communities.¹⁴ The free entry system allows prospectors to stake claims to the minerals on both public and private lands without notifying or consulting with landowners or with Aboriginal peoples who have rights in the land. Although Quebec's *Mining Act* has undergone a number of reform processes over the years, these have never addressed this most fundamental and problematic principle of the *Act*.

The notion of "free entry" in the *Act* can be defined as: a right of free access to mineral resources of a territory. It confers three types of rights upon mining entrepreneurs:

- The right to access the majority of a territory for the purpose of prospecting (articles 17, 18, 26)
- The right to appropriate the mineral resources of a territory through the legal vehicle of a mining claim (articles 8, 9, 40, 47)
- The right to carry out exploration work, and in the case of a discovery of an economically beneficial deposit, the right to exploit the deposit (articles 64, 65, 100-105, 235, 236)

The explicit objective of the *Act* (article 17) is to "promote prospecting, mineral exploration and development, and the development and operation of underground mineral reserves, taking into account other possible uses of the land in the territory". The implementation of the *Act* has

¹⁰ See <http://www.mrn.gouv.qc.ca/ministere/historique/index.jsp>

¹¹ *Le droit minier*, Denys-Calude Lamontagne, Jean Brisset des Nos, 2^{ème} édition, Editions Thémis, Pages 16 to 20.

¹² Quebec Auditor General, 2009.

¹³ See <http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=5&file=2003C15F.PDF> and http://www.mrnf.gouv.qc.ca/publications/enligne/mines/claim/leclaimdesigne_territoire.asp

¹⁴ Barry Barton, *Canadian Law of Mining*, Calgary: Canadian Institute of Resources Law, 1993. Justin Duncan and Maureen Carter-Whitney, *Balancing Needs, Minimizing Conflict : A Proposal for a Mining Modernization Act*, Ecojustice and Canadian Institute for Environmental Law and Policy, 2008. Jean Pierre Lacasse, *Le claim en droit québécois*, Ottawa: Université d'Ottawa, 1976. Ugo Lapointe, *Origins of Mining Regimes in Canada & The Legacy of the Free Mining System*, Conference Rethinking Extractive Industry: Regulation, Dispossession, and Emerging Claims, York University, 2009 (*Power Point*). Ugo Lapointe, [De la ruée vers l'or californienne au Québec minier contemporain : le système de free mining et le pouvoir des communautés locales](#), Colloque international de la Commission sur l'approche culturelle en géographie, 2008.

resulted in the principle of “free entry” completely overshadowing the latter portion of article 17.

Ecojustice recognizes the job creation and tax revenue benefits related to the mining sector, and acknowledges that the province of Quebec has an interest in maintaining a sustainable mining industry. However, the extensive legal and economic privileges that currently benefit Quebec’s mining industry have serious negative consequences for the rights of individuals to private property, the rights of communities to engage in land use planning, and on the collective right to a clean and healthy environment. A better balance must be sought. In light of this, we propose that the *Mining Act* be subject to the amendments discussed in Section 2.1 of this report.

The reform of the *Mining Act* should implement a system that respects individual rights and the environment, while adhering to the broad terms of article 17, which invite (but have not engendered to date) a sustainable development approach. In short, the development of mining activity should only proceed if it can be fully rationalized as the best possible use for the land on which it is situated.

The shortcomings of the Mining Act

The current mining regime allows anyone to acquire a claim in Quebec, without even setting foot in the province. Since 2000, the acquisition of a claim occurs by designation on a map, or by the “click and claim” process through a government website.¹⁵ The moment the form is correctly completed and where no other mining claim exists on the desired plot of land, the claim is acquired. The claim confers a right of access to the land as well as an exclusive right of exploration of mineral resources that may be underground. In light of article 8 of the *Mining Act*, the claim is a “real property right”. The claim confers a right to property of the underground mineral resources, regardless of who owns the rights to the surface. As with most Canadian jurisdictions, there is a distinction made between ownership of surface rights and underground mineral rights.

In granting to the claim holder a right of access to explore for minerals, the *Mining Act* makes very little distinction between different types of exploration work that may be undertaken. In practice, the environmental impacts of different exploration activities vary tremendously, and may be very serious depending on the equipment used, the duration of the work, and the sensitivity of the local environment. Therefore, it is only prudent that the Minister of Natural Resources and Fauna distinguish between “preliminary”, “intermediate”, and “advanced” exploration (see Section 2.1 below).

During exploration, neither a landowner, nor a local or regional government may refuse to grant access to a claim holder. This applies to the majority of First Nations territories in Quebec, whether recognized or asserted, as well as the territory defined in the *James Bay and*

¹⁵ See www.mrn.gouv.qc.ca/publications/enligne/mines/claim/index.asp

Northern Quebec Agreement (henceforth the JBNQA)¹⁶ for the Cree, Inuit and Naskapis nations, or those asserted by other First Nations groups in Quebec.¹⁷ In addition, the *Mining Act* does not impose any obligation upon a mining company to forewarn or inform individuals or concerned parties about exploration work. We therefore recommend that the *Sustainable Development Act* and its principles¹⁸ be respected and that reforms to the *Mining Act* be implemented to guarantee that landowners, local and regional governments, and First Nations be informed once a claim is acquired. Continued notification of property owners, local authorities and First Nations of changes in the status of a claim and activities on that claim should extend throughout the entire mining process, from exploration to exploitation.

Even if the Quebec Ministry of Natural Resources and Wildlife (MNRW) declares that it is necessary to obtain the consent of concerned parties and individuals prior to proceeding with any work, this opinion contradicts the terms of article 235 of the *Mining Act*. In essence, the *Mining Act* encourages the claim holder to reach an agreement with the landowner prior to commencing exploration and exploitation work. However, such an agreement is not obligatory and without such an agreement, exploration companies may resort to expropriation procedures against a landowner. Unfortunately, the *Mining Act* does not specify a mediation process, any legal recourse for individuals and communities involved, or any mechanism for compensation.¹⁹ Furthermore, this right of expropriation may apply to lands adjacent to the area of the mining claim.²⁰

A claim is renewable under the condition that the holder of the title has acted in conformity with the regulations and has conducted exploration work.²¹ Only the MNRW has the ability to expropriate a claim if deemed necessary for the purposes of “public utility”.²² However, this ministerial prerogative has rarely been utilized because of the fear that it would discourage investment in Quebec’s mining industry.²³ In addition, the scope of the term “public utility” is limited in comparison with the notion of “public interest”, which encompasses purposes responding to the collective interest instead of purposes limited to pieces of work and public infrastructure. The scope of this prerogative is therefore limited, and so are the MNRW’s powers to promote the public interest.

If a claim holder discovers a mineral deposit, they may submit a request to the ministry for a mining lease. Leases are granted for a 20 year period and confer on the claim holder the exclusive rights to exploitation of the mineral resources.²⁴ The primary condition associated with obtaining a mining lease is the demonstration of an economically exploitable mineral deposit.²⁵ The mining developer must also submit a rehabilitation plan for the mining site, as

¹⁶ JBNQA, chapters 5 and 7

¹⁷ See <http://www.autochtones.gouv.qc.ca>

¹⁸ See *supra* notes 5 and 6

¹⁹ Article 235, paragraph 1, *Quebec Mining Act*

²⁰ Article 236, *Mining Act*

²¹ Articles 61 and 62, *Mining Act*

²² Article 82, *Mining Act*

²³ No application of this prerogative was identified in the preparation of this report.

²⁴ Article 101.1, *Mining Act*

²⁵ Article 101, *Mining Act*

well as a financial guarantee prior to commencing any work.²⁶ Unfortunately, the limited guarantees required under the *Act* are often inadequately applied and involve insufficient amounts, resulting in a situation where the guarantees do not protect the government and the public from absorbing the future rehabilitation costs of contaminated mine sites.²⁷

Yet another significant gap in the environmental management of the Quebec mining sector is the fact that no mining exploration project and only a minority of mining exploitation projects are subject to a public environmental impact assessment evaluation under the *Environment Quality Act* (hereinafter “EQA”). Mining projects that are below the EQA’s daily threshold of 7000 metric tonnes of ore produced²⁸ (equivalent to 2.5 million tonnes per year), are not subjected to the public process pursuant to the EQA’s regulation. However, in land that falls under the authority of the *JBNQA*, all mining projects are correctly subject to an environmental impact evaluation.²⁹ We strongly believe that all Quebecers and First Nations within Quebec should be treated in the same way as those in the north under the *JBNQA* – the public should have the opportunity to examine the potential environmental and social impacts of all proposed mining projects.

For all of these reasons, we are of the opinion that the *Mining Act* confers excessive privileges upon the mining industry, while establishing a regime that unfairly dispossesses private property owners, local and regional governments, First Nations and the public of their fundamental rights. A reform of this law, as well as its associated regulations and related provisions in laws such as the EQA, is urgently needed. This is the only way that Quebec can ensure a better coexistence of mining interests, environmental protection and the broader societal interests of Quebecers.

²⁶ Articles 232.1, 232.2, 232.3 et 232.4, *Mining Act*. See also article 111, *Regulation respecting mineral substances other than petroleum, natural gas and brine*, R.Q. c. M-13.1, r.2

²⁷ Quebec Auditor General, 2009

²⁸ Article 2 p), *Regulation respecting environmental impact assessment and review*, R.Q. c. Q-2, r.9.

²⁹ Chapter II, *Environment Quality Act*; R.S.Q. c. Q-2

II-PROPOSED AMENDMENTS

1. PROTECTING THE RIGHTS OF INDIVIDUALS AND COMMUNITIES

Establishing a genuine consultative democracy prior to mineral exploration and exploitation activities – access to information, consultation and consent

The *Mining Act* must be read and interpreted in conjunction with other legislative texts such as the *Sustainable Development Act of Quebec*, the *Quebec Civil Code*, the *Quebec Charter of Human Rights and Liberties*, the *Environment Quality Act* and the rights of aboriginal peoples in Canada. These laws highlight the importance of protecting human rights, dignity, and integrity as well as the right to private property in the development of a healthy and sustainable environment.³⁰ Additionally, these laws support the establishment of a consultative democracy, notably through the promotion of principles such as: the right to information, the right to consultation, free and informed consent of individuals and communities, engagement of the public in decision-making processes.³¹

Objective of the Mining Act

The explicit objective of the *Mining Act* is to “promote prospection, mineral exploration and development...taking into account other possible uses of the land in the territory»³². However, the *Mining Act* does not include any precise mechanism to allow for the accounting of other possible uses of the land, and there is no legal process through which democratic participation in mining decisions is ensured. The *Mining Act* does not define the values and principles that underlie its application, such as for example the *Quebec Forest Act*, whose stated purpose is “to foster as a common heritage and promote sustainable forest development in order to meet the economic, environmental, and social needs of present and future generations”³³. It is therefore necessary to re-visit the objective of the *Mining Act*, which is now over twenty years old, and which still endorses the concept of “free mining” without integrating other social and environmental values. It should be harmonized with other laws in Quebec, Canada and internationally that offer a more thorough consideration of social and environmental values that exist today and that assure the continued protection of citizens and the environment.

³⁰ Article 6, *Sustainable Development Act*; articles 7, 10, 947, 951 et 952, *Civil Code of Quebec*; preamble and articles 6, 7 and 8, *Quebec Charter of human rights and freedoms*; article 19.1, *Environment Quality Act*; article 7, *Canadian Charter of Rights and Freedoms*; article 35, *The Constitution Act*, 1982.

³¹ Article 6, *Sustainable Development Act*; articles 10 and 1399, *Civil Code of Quebec*; preamble, *Quebec Charter of human rights and freedoms*

³² Article 17, *Mining Act*

³³ Preliminary provision, *Forest Act*, R.S.Q. c. F-4.1

Transparency, information and public participation

To this effect, the principle of *transparency and access to information* should be incorporated into a new *Mining Act*. In fact, this principle is not at all required in the current law, and this has generated frustration among private property owners, municipalities and First Nations. None of the above are ever informed or forewarned of the acquisition of a land claim by a third party on their land or territory. Ensuring access to pertinent mining information that is clear and pertinent would appear to represent a bare minimum, especially given that the normal consequence of a mining land claim is exploration work, which could lead to the expropriation of surface rights holders³⁴, and which could eventually lead to the exploitation of a mine.

The principle of *effective citizen participation* demands that the *Mining Act* includes requirements for consultation and informed consent of private property owners, municipalities and First Nations, with respect to mining exploration and exploitation work. In order to ensure that such participation is based on prior informed consent, and in order to ensure that the basic “free and enlightened consent” provisions of the *Civil Code of Quebec* are met³⁵, the aforementioned transparency and access to information requirements must be met. Individuals, communities and First Nations must clearly understand the nature and consequences of any proposed mining projects.

Articles 65 and 235 of the *Mining Act* are particularly problematic as they do not oblige mining entrepreneurs to inform, consult, or obtain consent from land owners prior to the execution of their work. Furthermore, article 235 grants recourse to expropriation for the mining claim holder, in order to allow them to acquire “all that is necessary to access the land or execute the work”³⁶. The conferral of such a broad expropriation power without any concomitant specification of a preliminary mediation process, free legal representation or any guaranteed compensation is highly problematic. This situation is even more anomalous given that paragraph 2 of article 235 provides that on land leased by the state, the mining proponent “cannot exercise his right to access the land or his right to undertake exploration and exploitation work “unless he obtains the lessee’s consent or pays compensation to him”³⁷. It is incongruous that the Quebec legislature has allowed a situation whereby there is distinct treatment (in terms of consent and compensation) for private property owners and Crown land’s lessees. Private property owners are deserving of the same protections as the Crown land’s lessees, and respect of their rights is recognized in the *Civil Code of Quebec* and the *Quebec Charter of Human Rights and Freedoms*³⁸.

Consequently, we recommend that the *Mining Act* be modified to guarantee access to information, consultation and the effective participation of the residents, municipalities, and First Nations directly affected by mining developments. This will require amendments to the law that specify conditions through which the prior informed consent of private property

³⁴ Articles 65, 235 and 236, *Mining Act*

³⁵ Articles 10 and 1399, *Civil code of Quebec*

³⁶ Article 235, paragraph 1, *Mining Act*

³⁷ Article 235, paragraph 2, *Mining Act*

³⁸ Articles 6, 7 and 8, *Quebec Charter of human rights and freedoms*; articles 947 and 952, *Civil Code of Quebec*

owners, municipalities and First Nations prior to the execution of most types of mining exploration and exploitation on their land. If mining proponents are unable to obtain such consent, a mechanism to resolve disputes should be established, one that is fair, transparent and equitable, and which provides for legal and technical assistance to those in need.

First Nations

It is worth noting that First Nations are disproportionately affected by the shortcomings of the *Mining Act*. A very limited number of provisions in the law make reference to aboriginal peoples³⁹ and none touch upon their constitutionally guaranteed rights. The lack of any requirement to inform, consult and accommodate First Nations in a manner that specifically addresses recent Supreme Court of Canada decisions is highly problematic. When governments make decisions that risk having an impact on Aboriginal rights and interests, the Crown has a legal duty to consult and reasonably accommodate the concerned First Nations⁴⁰. Even though the *Mining Act* applies subject to the provisions in the *JBNQA* and the *Northeastern Quebec Agreement (NQA)*⁴¹, these conventions were concluded with only three of the 11 Aboriginal groups of Quebec⁴², creating an imbalance regarding the treatment of rights among different Aboriginal groups in Quebec. Furthermore, even though the *JBNQA* and the *NQA* guarantees access to information and the consultation prior to exploitation work, these guarantees do not apply to mining exploration work, which very rarely is the object of preliminary information sharing and consultation⁴³. As such, we believe that the *Mining Act* regime, which reinforces the historical paradigm of “free mining”, may be deemed unconstitutional and not in conformity with the most recent *Supreme Court* decisions regarding aboriginal rights⁴⁴.

Proposed Reforms:

1.1 Objective of the Act

Modify the objective of the *Mining Act* to eliminate the primacy of mining rights over the rights of private landowners, municipal governments and First Nations. Ensure that the principles enunciated in the *Sustainable Development Act* are integrated into the preliminary dispositions of the *Act*.

Harmonize the provisions of the *Mining Act* with the principles that underlie other laws in Quebec, Canada, and internationally, such as the *Quebec Sustainable Development Act*, the *Quebec Charter of Human Rights and Liberties*, the *Rio Declaration on Development and the Environment*, and the *Aarhus Convention (Denmark) on Access to Information*.

[Reform of article 17, *Mining Act*, chapter II]

³⁹ Articles 33, 305.1 and 341, *Mining Act*

⁴⁰ See *Haida Nation v. British Columbia (Minister of Forests)*, [2004] 3 S.C.R. 511; See also *Taku River Tlingit First Nation v. British Columbia (Project Assessment Director)*, [2004] 3 S.C.R. 550, 2004 SCC 74.

⁴¹ Article 341, *Mining Act*

⁴² The 3 groups are the Cree, the Inuit and the Naskapis, see supra note 16, p.3

⁴³ Chapters 5, 7, 22 and 23, *James Bay and Northern Quebec Agreement*; Chapter II, *Environment Quality Act*

⁴⁴ Nigel Bankes, *The Case for the Abolition of Free Entry Mining Regimes*, *Journal of Land Resources and Environment*, 2004, volume 24, p. 317-322; Barry Barton, 1993; Ugo Lapointe, 2009.

1.2 Information Following the Acquisition of a Claim

The holder of a new mining claim must inform, by written notice, the private property owners, municipalities and First Nations communities within a 30 day period following the acquisition of the claim.

[Add to Mining Act, chapter III, section III]

1.3 Information Prior to Exploration Work

In order to proceed with preliminary, intermediate or advanced exploration work⁴⁵, the mining proponent must inform the concerned private property owners, municipalities and First Nations communities by written notice issued no later than 60 days prior to the commencement of exploration work.

The notice must include the following information:

- a. Geographical location or area where the holder of the mining claim wishes to carry out their work;
- b. A summary description of the proposed exploration work, and a schedule of the work to be performed;
- c. A description of the anticipated environmental impacts of the exploration work, and the measures that will be taken to reduce or eliminate such impacts.

Any modifications to the exploration work must be accompanied by a new notice at least 30 days prior to the beginning of the work.

In order to inform the general public, an online public registry containing this information should be established and updated every 15 days.

[Add to Mining Act, chapter IV, section II]

1.4 Consent Prior to Exploration Work

In order to proceed with exploration work on land privately held or occupied by a land holder, the holder of a mining claim must, prior to any work, obtain the consent of the concerned private property owners or land holders through a written agreement concluded no later than 30 days prior to the commencement of the exploration work.

The agreement must include the following elements:

- a. The information mentioned in paragraph 3 above;
- b. The specific period of time during which the holder of the mining claim is authorized to access the land;
- c. The name and contact information of the mining claim holders and for those who will be accessing the land on their behalf, and the means by which they would proceed with their exploration work;
- d. Any conditions that the holder of the mining claim must respect before, during and after the completion of the work;
- e. The measures that will be established during or after the work to ensure the effective protection of the environment and the rehabilitation of the site;
- f. The amount of compensation to be paid by the holder of the mining claim for damages resulting from its exploration work;
- g. Any conditions necessary to modify the agreement;
- h. A conflict resolution mechanism; and

⁴⁵ See the definition of these differentiated exploration works in section ii) below.

⁴⁶ "Public interest" must be interpreted broadly.

- i. Any other subject that the signatories may agree upon.

Priority of existing laws

This law does not have the effect of substituting for pre-existing legal obligations to obtain consent.

Right of refusal

Affected private property owners and landholders can refuse access to mining entrepreneurs. Mining entrepreneurs who hold subsurface rights to minerals and wish to carry out exploration work can proceed from an adjacent property, providing they conclude an agreement with third party property owners, landholders or the Crown.

Legal and Technical Assistance

Legal and technical assistance will be made available to private property owners, municipalities and First Nations communities who request it.

Information and powers of the minister

A copy of any agreement between relevant parties must be sent to the MNRW, who will then transmit it to the minister of MDDEP. Collectively or individually, and following the recommendation of the conflict resolution process, the MNRW and MDDEP may order that work not begin or that such work cease until such an agreement is concluded.

[Reform of article 235 and addition to Mining Act, chapter IV]

1.5 Consent Prior to Advanced Exploration and Mining Work

Whoever wishes to proceed with advanced exploration and mining must conform to the same conditions as those enumerated in paragraph 4, with the following modifications:

- a. An agreement is only necessary with respect to municipalities, First Nations, and/or interested regional organizations;
- b. The agreement must include a preamble, in which the parties express the vision, principles and values on which the agreement is based;
- c. The agreement must include a section on environmental aspects of the work, describing the means by which the proponent will protect the environment, as well as the means to reduce or eliminate any foreseen environmental risks and impacts;
- d. The agreement must include a section on social and historical aspects, that addresses social and community development, the protection of cultural and historic heritage, as well as the means to reduce any foreseen social risks and impacts;
- e. The agreement must include a section on economic aspects, that addresses employment, training, business opportunities, financial compensation and the sharing of profits and revenues; and
- f. The agreement must include a monitoring mechanism for the purposes of the agreement.

[Reform of article 235 and addition to Mining Act, chapter IV]

1.6 Public Interest and Power of the Minister

The minister of the MNRW can order the cessation of all mining work, or can delay their start of work, if he/she deems it necessary for reasons of the public interest⁴⁶. After a period of six months, if the Minister considers that the cessation of the work should be made permanent, he/she may proceed to expropriate the mining claim.

[Reform of article 82 and addition to Mining Act, chapters III et V]

2. ENHANCING ENVIRONMENTAL PROTECTION

Making environmental impact assessments obligatory for all new mines and for some advanced exploration projects

Environmental impact assessment procedures exist in theory, but are not applied in practice

In reality, only a small proportion of mining exploitation projects is subject to a public evaluation of environmental impacts as described by article 31.1 of the *Environmental Quality Act* (hereafter the EQA). This is because the *Regulation on the evaluation and examination of environmental impacts* limits the application of article 31.1 by imposing a threshold of 7,000 tonnes of production per day for metal and asbestos mines and factories⁴⁷ (the equivalent of almost 2.5 million tonnes of mining residue per year). Below this threshold, proposed mines are not subject to an environmental impact study. This arbitrary threshold is overly permissive and is almost never surpassed. Consequently, environmental impact studies are very rare in Quebec's mining sector.

Even though there were approximately 24 metal mines active in Quebec in 2008, only one of them had been subjected to a full environmental impact study by virtue of article 31.1 of the EQA; the Lac Bloom iron mine in the North Shore region. In fact, since 1994, an analysis of the public registry of the *Ministry of Sustainable Development, Environment and Parks* and the *Bureau of public hearings concerning the Environment* (BPHE) reveals that those parts of Quebec not covered by comprehensive land claims agreements, only three mining projects have undergone a complete environmental impact study⁴⁸: the Niobium project in Oka (radioactive material), the Lac Bloom project (more than 7,000 tonnes/day) and the Canadian Malartic project (more than 7,000 tonnes/day).

This situation is completely inadequate and anachronistic considering the values and expectations of Quebec society. The extraction and transformation of metals creates risks of significant negative impacts on the environment and on surrounding communities⁴⁹. Not only does the extraction and transformation of metals require important quantities of energy, water and toxic reagents (e.g. cyanide), but also generates vast quantities of atmospheric pollution, greenhouse gases, and especially contaminated mining wastes that must be stored and cared for in perpetuity. Even though the techniques and industry practices to confine mining wastes and the environmental efficiency of industrial procedures has improved over the last number of

⁴⁷ Article 2 n.8) and p), *Regulation respecting environmental impact assessment and review*, R.Q. c. Q-2, r.9. However, following this regulation, all uranium mines are subject to obligatory environmental impact studies; mines other than uranium mines, metal or asbestos are subject if the daily production exceeds 500 metric tonnes.

⁴⁸ See www.mddep.gouv.qc.ca/evaluations/ and www.bape.gouv.qc.ca/sections/rapports/tous/index.htm

⁴⁹ For a general overview, see : Aubertin, Bussière et Bernier, *Environnement et gestion des rejets miniers : Manuel sur cédérom*, Montréal : Presses internationales polytechniques, 2002; Canadian Boreal Initiative (CBI), *Mineral Exploration Conflicts In Canadian's Boreal Forest*, 2008; Dudka et Adriano, *Environmental impacts of Metal Ore Mining and Processing : a Review*, Journal of Environmental Quality, vol.26 : 590-602, 1997; IIED et WBCSD, *Breaking New Ground: Mining, Minerals, and Sustainable Development*, London: Earthscan, 2002. Ugo Lapointe, *Le développement aurifère du Nord québécois: Enjeux environnementaux*, 74^{ème} Congrès de l'Association francophone pour le savoir (ACFAS), 2006; Northwatch et MiningWatch Canada, *The Boreal Below: Mining Issues and Activities in Canada's Boreal Forest*, 2008.

years, there remain significant impacts and risks of contaminating surrounding ecosystems. This is true both for the short and the long term, notably when it comes to the risk of acid mine drainage and the potential contamination of surface and groundwater from heavy metals.

In this context, requiring that all mining (or mineral exploitation) projects undergo environmental impact studies pursuant to the terms of the *EQA* is the least that should be done. Enforcing mandatory environmental impact studies would better ensure that the principles in the *EQA* and the *Sustainable Development Act* are respected, notably, respect for the quality of life and the right to a clean and healthy environment, as well as the principles of environmental protection, prevention, and transparency⁵⁰. It would also allow for a similar application of the applicable legislation in southern Quebec to that which is applicable by virtue of the *JBNQA*. The *JBNQA* states that all mining exploitation projects must be subject to an environmental and social impact study, and does not impose an arbitrary 7000 tonnes/day threshold.⁵¹ The different standards between southern and northern Quebec are incomprehensible from an environmental policy standpoint, and we recommend that an environmental impact study regime be established for all mining projects.

In addition to enhancing information accessibility for affected populations, subjecting all mining exploitation projects to a mandatory environmental impact studies under the *EQA*, would ensure that public consultation processes under the *BPHE* take place. In effect, citizens, organizations and municipalities that wish to make use of such consultation may do so by submitting a request to the *MSDEP* according to the terms established by the *EQA*⁵². However, because of the high threshold to trigger an environmental impact study, very rarely does the procedure for public consultations ever get put to use. As such, since mining projects are very rarely subjected to the environmental impact study procedure under the *EQA*, the *BPHE*'s acknowledged role as an agency designed to disseminate information and promote democratic transparency is undermined as far as mining is concerned.

When a mining exploitation project surpasses the threshold, the *Guidelines for the Implementation of an Environmental Impact Study of a Mining Project* must be used⁵³. This document provides a framework for the analysis undertaken by the *MSDEP*. On the one hand it provides instruction to guide mining promoters toward the development of their environmental impact studies (if they are required)⁵⁴, and on the other hand it is used to evaluate the quality of the aforementioned environmental studies prior to awarding a certificate of approval⁵⁵. Despite the fact that it should be considered a fundamental text, it is mentioned neither in the *EQA* nor the *Regulation on the evaluation and examination of environmental impacts*. We recommend therefore that the *EQA* be amended to confirm the

⁵⁰ Article 19.1, *Environment Quality Act*; article 6, *Sustainable Development Act*

⁵¹ Chapters 22 and 23, *James Bay and Northern Quebec Agreement*; Chapter II of the *Environment Quality Act*

⁵² Article 31.3, *Environment Quality Act*; Article 13, *Regulation respecting environmental impact assessment and review*, R.Q. c. Q-2, r.9

⁵³ Office of Environmental Evaluations (MDDEP), [Directive pour la réalisation d'une étude d'impacts sur l'environnement d'un projet minier](#), 2008.

⁵⁴ Articles 31.2, *Environment Quality Act*

⁵⁵ Article 31.5, *Environment Quality Act*

binding legal status of this directive, either by expressly referencing it in the existing regulation, or by creating a new regulation altogether.

A similar commentary applies to the *Directive 019 on the Mining Industry*⁵⁶. In effect, it also serves as an analytical tool used by the MSDEP for the granting of certificates of approval for mining projects that are subject to article 22 of the EQA, but not necessarily subjected to an environmental impact study under article 31.1 of the EQA. This guideline presents, among other things, a procedure to calculate the amount of pollutants discharged into the environment, as well as methods to manage the mining residue as a function of their environmental contamination risk level. Just like the *Guidelines for the Implementation of an Environmental Impact Study of a Mining Project*, we recommend that this guideline also be entrenched in a regulation in order for the norms, criteria and recommendations it contains to be effectively implemented in all mining projects. We also recommend that this guideline be harmonized with the criteria and the methods of environmental control required under the new *Metal Mining Effluent Regulations* pursuant to the federal *Fisheries Act*, when these criteria and methods are more protective of the environment than those in Quebec⁵⁷.

The overlooked and underestimated environmental impacts of mining exploration

There exists a false presumption that only mining production, as opposed to mining exploration activities, affects the environment. Exploration work often has a significant impact on the environment and communities. The use of heavy machinery notably for surface stripping, drilling, and the excavation of the earth and rocks can have severe impacts on the surrounding environment. The powered equipments required to carry out such tasks strip the ground by tearing up vegetation, digging deep holes and creating ruts. A large number of exploration projects require the construction of roads in order to access the site, often requiring the clearing of a sizable area. Furthermore, the establishment of exploration camps, often housing several dozen people, creates domestic waste, and requires the stockpiling of fuel, vehicles and mechanical equipment. In addition, the frequent use of helicopters and bush planes to transport equipment or for low level geophysical aerial surveys can have significant impacts on wildlife. These impacts are even more significant when cumulative effects of multiple impacts and multiple projects are considered. During a “rush” there can be more than a dozen exploration projects in the same region.

In light of these facts, it is inappropriate that exploration projects are not subject to any process of environmental impact study⁵⁸. It is even more anomalous that a large majority of these exploration projects are not even required to obtain a certificate of environmental authorization from the MSDEP⁵⁹. For most industrial activities, these certificates are normally

⁵⁶ Office of Water Management, (MDDEP), [Directive 019 sur l'industrie minière](#), 2005.

⁵⁷ *Metal Mining Effluent Regulations*, SOR/2002-222 of the *Fisheries Act*, R.S.C. 1985, c. F-14

⁵⁸ in effect, no disposition addresses this in the *Regulation Respecting Environmental Impact Assessment and Review*, R.Q c.Q-2, r.9.

⁵⁹ See *Directive 019 sur l'industrie minière* du MDDEP, p.2-3

required pursuant to article 22 of the EQA for all activities susceptible to emit “contaminating substances into the environment” or that lead to “a modification of the quality of the environment”⁶⁰. There is no doubt that the majority of exploration projects satisfy these two criteria. In fact, the public registry of the MSDEP reveals that only 15 or so exploration projects obtained a certificate of approval in the James Bay sector between 2006 and 2008, even though more than 300 exploration projects were active in the same time period⁶¹.

The EQA and its regulations do not effectively take into consideration the environmental repercussions associated with exploration projects. Although article 22 of the EQA imposes a general obligation to obtain a certificate of approval from the MSDEP (related to contaminating substances or modification of the environment), the *Regulation respecting the application of the Environment Quality Act* states that geophysical, geological and geochemical surveys, including notably any drilling work, are exempt from this obligation⁶².

In sum, the lack of oversight and assessment of mining exploration projects means that the province is incapable of providing adequate supervision of the mining exploration projects that take place in its territory. There is, therefore, no ability for the state to impose conditions to prevent or mitigate environmental impacts from exploration projects.

For these reasons, we recommend redefining the different types of exploration projects according to the degree of risk and impacts they represent toward the environment and communities, and requiring a larger proportion of these projects to acquire a certificate of authorization following article 22 of the EQA. We also recommend that the MSDEP subject certain advanced exploration projects to an environmental impact study upon request by a municipality, First Nations community or regional authority.

Proposed Reforms:

2.1 Classify the Different Types of Exploration Projects

Classify and specify the nature of exploration projects in order to consider the differing degrees of environmental and social impact risks inherent in their implementation. Exploration projects should be subdivided into three categories:

Preliminary Exploration

- a. Any surveys, whether geological, geophysical, geochemical or biogeochemical, which do not imply the implementation of intermediate or advanced exploration projects as enumerated below;

⁶⁰ Article 22, *Environment Quality Act*

⁶¹ See the public registry of the MSDEP: www.mddep.gouv.qc.ca/evaluations/projet-sud.htm et www.mddep.gouv.qc.ca/regions/region_10/industriel/Document.asp?tag=210,%3E,NOM_INTERVENANT

⁶² Articles 1 (para. 2), 2 (paras. 5 and 6) et 3 (para 3), *Regulation Respecting the Application of the Environment Quality Act*, R.Q. c.Q-2, r1.001; note that article 3, para. 3 of this regulation states that these works are exempted from the requirement to obtain a certificate of authorization, even if carried out in humid space, such as a peat bog, a pond, a marshland or a swampland.

Intermediate Exploration

- b. All drilling, clearing of vegetation or excavation making use of heavy machinery where the weight of the machinery exceeds two metric tonnes;
- c. All excavation, relocation or sampling of the overburden or bedrock exceeding 1000 m³, or on an area larger than one hectare;
- d. All clearing necessary for mining work (road access, camps, drilling sites, cleaning sites, heliport, etc.) in which the cumulative area affected within all claims for a project is greater than one hectare;
- e. All repeated flights at low altitude (less than 600m) in the same sector, involving 6 hours of flying or more per day, taking place over a period of more than five consecutive or cumulative days in a 30 day period; and
- f. All exploration camps used by more than 4 people for more than 200 person-days within a one year period;

Advanced Exploration

- g. All drilling, cleaning or excavation requiring the drilling of more than 15,000 linear metres within a period of one year, the displacement of ground or rocks in excess of 10,000 m³, or the surface stripping of an area larger than four hectares;
- h. All clearing of vegetation necessary for mining work (road access, camps, drill sites, cleaning, heliport, etc.) where the cumulative area is greater than 4 hectares;
- i. All repeated flights at low altitude (less than 600m) in the same sector, involving 6 hours of flying time or more per day over a period of 20 consecutive or cumulative days in a 60 day period;
- j. All exploration camps being used by eight people for more than 2000 person-days in a period of one year;
- k. The digging of ramps, galleries, and pits or other related work; and
- l. Any work requiring the buying, the deconstruction or relocation of one or more buildings belonging to others, including residences and public buildings.

These criteria serve to subdivide the different categories of exploration works by making use of the definitions and criteria already present in other regulatory and legislative texts in Quebec and Canada⁶³, as well as the decisions and recommendations expressed by organizations governed by these laws and regulations.

[Addition to the Mining Act, chapter I]

2.2 Certificate of Authorization Requirement for Intermediate and Advanced Exploration

Whoever intends to proceed with intermediate or advanced mining exploration projects must obtain as a precondition a certificate of authorization. This certificate is provided by the *Ministry of Sustainable Development, the Environment and Parks* (MSDEP), pursuant to article 22 of the *Environment Quality Act* of Quebec.

[Reform of articles 1, 2 and 3 of the Regulation Respecting the Application of the Environment Quality Act]

⁶³ Notably in Quebec :Quebec chapter 1 *Mining Duties Act* R.S.Q. c.D-15Quebec modified by L.Q. 2007, c. 12); article 46 *Natural Heritage Conservation Act*, R.S.Q. c. C-61.01; *An Act respecting threatened or vulnerable species*, R.S.Q. c. E-12.01, *Directive 019 on the mining industry of the MDDEP*, *Regulation respecting sanitary conditions in industrial or other camps*, R.Q. c. Q-2, r.3, articles 21, 21, 27 and 28 of the *Forests Act* (R.S.Q. c. F-4.1), the *Politique de protection des rives, du littoral et des plaines inondables* (D. 468-2005, 05-05-18), as well as article 108 of the *Regulation respecting mineral substances other than petroleum, natural gas and brine*, R.Q. c. M-13.1, r.2 and articles 69 and 70 of the *Quebec Mining Act*. Elsewhere in Canada: *Yukon Environmental and Socio-economic Assessment Act*, S.C. 2003, c. 7, *Nunavut Land Claims Agreement Act*, S.C. 1993, c. 29 and the *Mackenzie Valley Resource Management Act*, S.C. 1998, c. 25 in the Northwest Territories

2.3 Environmental Impact Study for Advanced Exploration

Provide the Minister of MSDEP with discretion to require an environmental impact study for advanced exploration projects if a request is made by a local or regional government or a First Nations community. When requested, the Minister is empowered and obliged to execute the request and apply the environmental evaluation procedure pursuant to the *Environment Quality Act* of Quebec.

[Addition to the Environment Quality Act, chapters I and II]

2.4 Require an Environmental Impact Study for Mining Exploitation

Subject all mining exploitation projects to the environmental evaluation procedure as outlined in the *Environment Quality Act* of Quebec. Eliminate the arbitrary threshold that triggers environmental evaluations for metal mines (currently fixed at 7,000 tonnes of production per day).

[Reform of article 2 the Regulation Respecting Environmental Impact Assessment and Review]

2.5 Convert Existing Guidelines for the Mining Industry into Regulation

Integrate *Guideline 019 on the Mining Industry* and the *Guidelines for the implementation of an environmental impact study for a mining project* into existing regulations to confirm their status under the law and to require their application on all mining projects.

[Addition to Environment Quality Act, chapter I]

3. SUSTAINABLE LAND USE PLANNING

Eliminating the primacy of mining rights over protected areas and reinforcing municipal land-use planning powers

The question of land use planning is at the heart of the concerns regarding the development and regulation of mining activity. In addition to intervening on a “project-by-project” basis, the different levels of government must also make use of available mechanisms and legislative tools in order to intervene on a much larger spatial and temporal scale. Among these tools, the development of land use plans must come from an integrated vision that takes into account the sustainable development and the conservation of resources. Currently, mining exploration and exploitation projects do not come within the purview of almost all municipal prerogatives in terms of territorial planning. In addition, the *Mining Act* effectively prevents the establishment of a network of protected areas in Quebec, preventing the completion of a network with protection for at least 12% of the ecologically and culturally valued land. This section identifies measures to remedy this situation.

Municipalities and Regional County Municipalities lack real power regarding mining rights

No municipal or regional entity has authority to direct or control mining activity within its territory. In light of article 30 of the *Mining Act*, sites on which mining activity may be forbidden are not determined by municipalities or regions, nor are they determined pursuant to formal consultations. Rather, they are allowed on the basis of a ministerial decree. In addition, according to article 5, 6 and 7 of the *Act Respecting Land Use Planning and Development*⁶⁴, the planning and development strategy of the territory determined by a Regional County Municipality (RCM) cannot demarcate the sections of its territory that it deems not appropriate for mineral exploration and development.

The first subsection of article 246 of the *Act Respecting Land Use Planning and Development* confirms the fact that municipalities and RCM’s have severely restricted powers:

No provision of this Act, or of a land use planning and development plan, an interim control by-law or resolution or a zoning, subdivision or building by-law has the effect of preventing the staking or designation on a map of a claim, or exploration or search for or the development or exploration of mineral substances or underground reservoirs, carried on in accordance with the *Mining Act*⁶⁵.

⁶⁴ R.S.Q., c. A-19.1

⁶⁵ Article 246 (para. 1), *An Act respecting Land use planning and development*, R.S.Q. c. A-19.1, our emphasis; see *Resources Graphicor Inc. c. Quebec (Ministère de l’Environnement)* (J.E. 93-301 (C.S.))

Clearly, priority is given to the development of mining activity to the detriment of sustainable and equitable land use planning by municipal governments. It is worth noting how this contradicts the spirit of article 85 of the *Municipal Powers Act* which stipulates that “a local municipality may adopt a by-law to ensure peace, order, good government, and the general welfare of its citizens”⁶⁶.

The first paragraph of article 246 contrasts with the second paragraph of the same article, as well as with article 8 of the *Regulation Respecting the Application of the Environment Quality Act*. In effect, this regulation confers additional decision-making powers upon municipalities and RCM’s concerning the usage and exploitation of surface mineral substances (sand, gravel, cut stone, etc.) on private property situated within their territory⁶⁷.

In sum, the primacy of the *Mining Act* prevents municipalities or RCM’s from comprehensively engaging in land use planning and protecting citizens and the quality of the environment in which they live. This situation effectively results in the breach of multiple principles found in the *Sustainable Development Act*, notably those concerning a right to health and to the quality of life, as well as the principles of precaution and prevention. Perhaps most importantly, the subsidiary principle is entirely circumvented by the *Mining Act*. The principle of subsidiary proposes that “powers and responsibilities must be delegated to the appropriate level of authority...decision-making centres should be adequately distributed and as close as possible to the citizens and communities concerned”⁶⁸. Faced with the primacy of mining rights, municipalities and RCM’s find themselves deprived of any real power to ensure the proper management and development of their regions according to their own priorities, for example through an emphasis on recreational and eco-tourism, or by concentrating on other types of resources, such as forests, agriculture and water.

We recommend, therefore, that article 246 of the *Act Respecting Land Use Planning and Development* be repealed or cancelled by a consequential amendment of Quebec’s *Mining Act*. We also recommend that municipalities benefit from all necessary legislative tools in order to manage mining activity on certain portions of their land.

Regional bodies: also lacking authority

For a number of years, regions have demanded participation in the development and management of natural resources within their territory, in particular concerning the exploitation of mineral resources. In 2007, the government took steps in this direction by creating the *Regional Land and Natural Resource Commission* (RLNRC).

⁶⁶ Article 85, *Municipal Powers Act* R.S.Q., c. C-47.1)

⁶⁷ Article 246 (para. 2), *An Act respecting Land use planning and development*, R.S.Q. c. A-19.1; Article 8, *Regulation Respecting the Application of the Environment Quality Act*

⁶⁸ Article 6 g), *Sustainable Development Act*; See also articles 6 a), i), j), k), l), m).

The creation of these bodies would appear to indicate the government's desire to increase the autonomy of regions and to move to a more decentralised decision-making process⁶⁹. The RCNRT contains regional consultation structures under the aegis of *Regional Conference of Elected Officers* (hereafter RCE). The RLNRC's are not substitutes for the Regional County Municipalities (RCMs); the objective of the commissions is to harmonize the planning process and the management of lands and resources in the sectors of forestry, energy, wildlife management, agriculture water and mining. Although a worthwhile initiative in principle, with regards to mining, the RLNRC's have no effective authority. In effect, the integrated regional development plans developed by the RLNRC's, may, if they so choose, address mining development matters, but they are not obliged to address the mining sector.

Regardless of these regional bodies' ability to contemplate mining development in land use and resource management, it is evident that neither the RCM's nor the RLNRC's have the prerogative to make core decisions with regards to mining activity in the territory of Quebec. In fact, land use planning for natural resources is entirely the function of provincial government, which leaves the regional agencies with little authority. This is unfortunate, and creates incoherent development plans considering that RCM land use plans have as their goal to integrate socio-economic development and environmental integrity into land use planning of the territory from a practical perspective⁷⁰

Finally, although sharing the power to direct land use planning and mining activity between local governments and regions is desirable - and is an appropriate means to incorporate the interests of affected individuals and populations - this transfer of power should not be done without a clear approach and objectives. In effect, without a precise framework, it is likely to produce negative impacts on the management of our collective resources such as water, forests and mineral substances. To this extent, clear legislative expectation must be included in the transfer of such powers while accompanied by adequate financial resources in order for their application. This requirement must equally be based on principles and guidelines that ensure, in practice, an increased protection of citizens and the environment.

Protected areas restricted by the Mining Act

It is concerning that the Quebec government has excluded all territories with existing mineral claims from its consideration for designating new protected areas⁷¹. It is even more disconcerting that the government has excluded these zones without a preliminary ecological study, primarily in order not to disturb the investment climate⁷². In effect, since the adoption

⁶⁹ See www.mrn.gouv.qc.ca/commissions-regionales.jsp and www.mrnf.gouv.qc.ca/regions/commissions/commissions-plans.jsp

⁷⁰ see http://www.mamrot.gouv.qc.ca/amenagement/amen_amen.asp; Article 5, *Act Respecting land use planning and development*.

⁷¹ That these rights be existing or not at the time of the selection of lands for protected areas. In effect, the MNRF considers the lands where there already existed mining rights as automatically excluded from the selection process of protected areas, with the pretext that their still exists « mining potential ».

⁷² CREAT and RNCREQ, Report presented to the MNRF during [Consultation sur la stratégie minérale du Québec](#), 2007, page 6, note bas de page 5.

in 2000 of the preliminary *Strategy on Protected Areas in Quebec* and of the publication of the *Quebec Strategy on Protected Areas in 2002*⁷³, significant efforts have been made to establish a coherent network of protected areas in Quebec⁷⁴. Yet, the primacy conferred by the *Mining Act* on mining rights over ecological, cultural and/or social values impedes the attainment of this goal.

Thus, even though the existing network protects approximately 8% of the Quebec land mass, this proportion is still a long way off the minimum objective of 12% recommended on the international level⁷⁵, an objective which is identical to the one fixed by the *Liberal Party, the Parti Québécois* and *Quebec Solidaire* during the last provincial electoral campaign in the fall of 2008⁷⁶. There is also an imbalance between areas being designated in different regions of Quebec; for example 9% of the area north of the 49th parallel has been protected but less than 5% has been protected south of the 49th parallel. In a number of cases, protected areas that have been promoted by citizens, conservation organizations and the MSDEP cannot be protected in their entirety due to the presence of mining claims⁷⁷. In other cases, for example in Abitibi-Témiscamingue where mining titles cover up to 35% of the total surface area of the territory, the establishment of protected areas is virtually impossible⁷⁸. Therefore, it often happens that watersheds or other areas valued for their ecological qualities are only partially protected, or quite simply not protected at all.

It is completely inappropriate that a mining claim can serve as a *de facto* sterilizing factor when considering a given area for inclusion in a future network of protected areas or from any other valued use (eco-tourism, hunting and fishing, agriculture, science and technology, development prioritizing other resources of the land, etc.). This establishes a priority on mining development as the most appropriate usage of the territory. In addition, this violates a number of fundamental democratic principles that underlie our society, notably those relating to consultative and transparent planning and management of land. The precedence accorded to mining rights also serves to contradict the right to a healthy environment as well as principles of conservation, preservation of biodiversity and the natural and cultural heritage of the Quebec community, particularly as promoted in the *Environment Quality Act, Act Respecting the Protection of Natural Heritage*, and the *Sustainable development Act*⁷⁹.

⁷³ See http://www.mddep.gouv.qc.ca/biodiversite/aires_protegees/index.htm

⁷⁴ The World Union for the Conservation of Nature (IUCN, 1994) defines a protected area as « a portion of land and/or of the sea that is specially protected for the purpose of maintaining biological diversity, as well as natural and cultural resources and managed by efficient means, judicially or other. » (source : MDDEP online)

⁷⁵ See notably the Brundtland Report of the Global Commission for the environment and development in 1987. See also the *United Nations Convention on biological diversity* for additional information (www.cbd.int) as well as the International Union for the conservation of nature (www.iucn.org)

⁷⁶ See for example: <http://elections.radio-canada.ca/elections/quebec2008/2008/11/23/004-Bilan-semaine-3-elex.shtml> et www.cyberpresse.ca/le-soleil/actualites/environnement/200903/29/01-841420-quebec-cree-14-nouvelles-aires-protegees.php.

⁷⁷ This is the case in particular of the protected areas of the Rivière-George, Vaudray-Joannes, Albanel-Témiscamie-Otish, Paakumshumwaau-Wemindji and many others.

⁷⁸ Action Boréale de l'Abitibi-Témiscamingue (ABAT), *Mémoire sur la Stratégie minérale du Québec*, présenté au Ministère des Ressources naturelles et de la Faune du Québec, 2007, pp. 4 to 6.

⁷⁹ Article 1, *Natural Heritage Conservation Act*, R.S.Q. c. C-61.01; Article 19.1, *Environment Quality Act*; Articles 6 c), k), l), m), *Sustainable Development Act*.

We recommend therefore that the primacy of mining rights vis-à-vis the protection of valued ecological and cultural lands be re-evaluated. In this sense, we recommend that the MNRF and the MSDEP, jointly or individually, must be empowered to order the cessation of mining work and to proceed with an expropriation of mining claims on territories that are valued for their ecological and cultural values.

Proposed Reforms:

3.1 Repeal Article 246 of the Act Respecting Land Use, Planning and Development

Repeal article 246 of the *Act Respecting Land Use, Planning and Development* or either through an amendment to that law, or through a consequential amendment in the *Quebec Mining Act*.
*[Reform the Act respecting Land use planning and development;
Add specific provision in Mining Act]*

3.2 Reinforce the Powers of Municipalities/RCM's to Act in the Public Interest

A municipality or a regional county municipality (RCM) should be given authority to withdraw any part of its territory from mining work for reasons of public interest or for the general well-being of its population, in conformity with article 85 of the *Municipal Powers Act* of Quebec, as well as the principles enumerated in article 6 of the *Sustainable Development Act* of Quebec.

Such a decision is to be described in the official land use plan, in conformity with articles 5 to 7 of the *Act Respecting Land Use, Planning And Development*.

If exploration claims or exploitation leases exist on part of the withdrawn territory, the holder of these rights must obtain the consent of the municipality or the RCM prior to the execution of all mining work, in conformity with recommendation 1.4 and 1.5 above. A municipality or RCM may also request that the minister order the cessation of all mining work, in conformity with recommendation 1.6 above, in which case the minister would be obliged to execute the request.

[Add to Mining Act; Reform of Act respecting Land use, planning and development]

3.3 Right to the Protection of Valued Ecological and Cultural Land

Eliminate the primacy of mining rights vis-à-vis the rights to protect valued ecological and cultural lands.

Permit the MNRF and the MSDEP, jointly or separately, on their own initiative or at the request of an exterior organization, to order the cessation of mining work and the expropriation of mining claims on territory valued for its ecological and cultural quality. In the case of a request from a regional or municipal government, or a First Nation community, the minister is required to execute the request.

Explicitly enlarge the field of application of the concepts « public utility » and « public interest » to apply to the creation of protected areas and the protection of valued ecological and cultural territory, as per recommendations 1.6 and 3.2 above.

*[Reform articles 82 and 304 and add Mining Act,
chapters III and V ; Add to Act protecting the natural heritage]*

4. APPLYING THE POLLUTER PAYS PRINCIPLE

Requiring solid financial guarantees to ensure complete rehabilitation and naturalization of all affected mining sites, including open pit mining sites

In April 2009, the report from the Auditor General of Quebec highlighted the manner in which different legislative and administrative measures have failed to minimize the risk that the state and Quebec society will be held liable for future environmental restoration costs⁸⁰. In short, the *Mining Act* does not sufficiently protect citizens and the environment vis-à-vis the environmental and financial risks of a mining company declaring bankruptcy and abandoning a contaminated site. Unfortunately, when sites are abandoned, the state and its citizens must bear the costs of restoration and suffer the negative effects of environmental degradation. This section provides an analysis of this problem and proposes corrective legislative measures.

Financing the environmental externalities of the mining industry: More than \$300 M paid by the public for abandoned mine site rehabilitation

The territory of Quebec is littered with orphaned or abandoned mines. These either have no owner, the owners refuse to restore the sites, or the owners simply do not have the means to restore the land⁸¹. These abandoned sites can cause serious environmental, economic, and social problems, as well as health and security problems⁸². Currently, the Quebec taxpayers are assuming the financial burden of restoring these sites. In fact, since 1990, Quebec citizens have paid more than \$40 million in restoration fees for abandoned mining sites, and this number is likely to increase to over \$264 million in the next 10 years in order to restore some 345 abandoned exploration and mining sites⁸³.

Holes in the law expose Quebec taxpayers

To remedy this situation and respect the polluter pays principle⁸⁴, the Quebec government amended the *Mining Act* in the mid-1990s. Since 1995, the *Mining Act* has required that all mining enterprises submit a restoration plan and a financial guarantee corresponding to 70% of the estimated costs of restoration prior to commencing any exploitation work⁸⁵. However, the Auditor General of Quebec revealed two major weaknesses with the legislative changes⁸⁶:

⁸⁰ Auditor General of Quebec, 2009, p. 2-20

⁸¹ See www.abandoned-mines.org/home-f.htm

⁸² Ibid; see supra note 49, p.11; see also article in the *La Presse* newspaper concerning [le bris d'une digue de rétention](#) près de Chapais (Quebec) in June 2008.

⁸³ Auditor-General of Quebec, 2009, p.2-20; See also: [Discours sur le budget 2007-2008](#) du gouvernement du Québec; Bussière, Aubertin, Zagury, Potvin, Benzaazoua, [Principaux défis et postes de solution pour la restauration des aires d'entreposage de rejets miniers abandonnées](#), Symposium sur l'environnement et les mines, 2005; Simon Laquerre (Conseil régional de l'environnement de l'Abitibi-Témiscamingue), [Sites miniers orphelins : adoptons des politiques plus fermes](#), Gaïa Presse, 2009.

⁸⁴ Article 6 o), *Sustainable Development Act*

⁸⁵ Articles 232.1 to 232.10, *Mining Act*

⁸⁶ Auditor-General of Quebec, 2009, pp. 2-20 to 2-24

1. The financial guarantee only covers disposal areas for mining wastes, not the whole of the affected site (e.g. roads, buildings, open-pits, etc.);
2. No deposit of the financial guarantee is required prior to the start of mining, allowing mining companies to delay making payments until the end of the estimated lifespan of a mine.

With respect to the first legislative loophole, the report from the Auditor General revealed that the financial guarantees associated with the 25 case studies examined was approximately \$109 million. This figure paled in comparison with the estimated costs of restoration for the entirety of the affected sites, which amounted to \$352 million. This represents a gap of \$243 million in financial guarantees to ensure the complete restoration of the 25 cases studied by the Auditor General⁸⁷.

Furthermore, article 111 of the *Regulation respecting mineral substances other than petrol, natural gas and brine* provides that the guarantee of 70% only applies to “that part of the work required under the plan that relates to the rehabilitation and restoration of accumulation areas”⁸⁸. Since waste disposal areas (accumulation areas) are the only locations that are subject to this financial guarantee, the infrastructure that is necessary for the mine to function, such as roads and buildings, are not part of any rehabilitation guarantee. Therefore, in practice, many of the risks associated with mining restoration remain the long term responsibility of the Quebec government and its taxpayers. We are left to question why the financial guarantee does not equal 100% of the evaluated costs to ensure the complete restoration of all affected sites. This approach would be consistent with the polluter pays principle, the related principle of cost internalization, and the protection of the environment pursuant to the *Sustainable Development Act*⁸⁹.

This recommendation of a 100% financial guarantee applied to all affected sites would not represent an undue burden on the mining industry. The costs associated with the restoration of mining sites generally represent 5 to 10% of the initial investment necessary to open a new mine⁹⁰. Even in the case of complete restoration for open pit mines, this proportion remains generally under 15% (see below).

The second important loophole concerns the excessive flexibility in the payment methods of the financial guarantee, as per articles 111 to 115 of the *Regulation concerning mining substances other than petrol, natural gas and brine*⁹¹. First of all, the type of financial guarantee provided is left to the discretion of the mining company. Secondly, the mining company benefits from the possibility of delaying the payment of the guarantee as a function of the anticipated lifespan of the mine. In effect, this means that the payment of the guarantee can be delayed 15 years after the beginning of any work as a function of a calculation of the

⁸⁷ Ibid.

⁸⁸ c. M-13.1, r.2

⁸⁹ Article 6 c), o), p), *Sustainable Development Act*

⁹⁰ For example, close to \$800 million of investments are necessary to initiate the Osisko project in Malartic, whereas the costs of restoration at the closing are estimated at this point to be less than \$50 million (Corporation Osisko, Plan de fermeture préliminaire, March 2009, p.3).

⁹¹ c. M-13.1, r.2

mineral reserves to be exploited by the mining company. Yet, the calculation of the reserves depends on the surrounding economic conditions, such as the price of metals and the costs of production, two variables that can evolve over the course of the lifespan of a mine and can even lead to a mine prematurely closing down. If the Quebec government does not require adequate financial guarantees at the outset, there is a substantial risk that the funds will be insufficient when the mine closes or when restoration work is required. The cases Manitou, East Malartic, Sigma Lamaque and Copper Rand⁹², where the mining company suffered financial difficulties, serve as a reminder of the risks to which the Quebec taxpayer is exposed.⁹³

In addition to the gaps and shortcomings of the *Mining Act* regulations, its inadequate application was also brought into question by the Auditor General. Of the 25 cases examined by the Auditor General, two had begun mining without having submitted their restoration plan; 8 did not submit the full payment of their financial guarantee; and 10 did not respect the timelines outlined in the law regarding the review of rehabilitation plans⁹⁴. In sum, almost 50% of cases studied did not respect the conditions established under the *Mining Act* and its regulations, and this happened without any fines or prosecutions by the government against the companies.

We recommend reforms to the *Mining Act* in order to avoid all possible risks of imposing further burdens on Quebec's taxpayers and their environment with the legacy of abandoned mining sites. To accomplish this, the financial guarantee for new mines must be increased from 70% to 100% and must cover the entirety of the affected sites. It must also be made payable prior to commencing any work. We also recommend the establishment of a special fee of 0.5% as applied to the net value of any given mining project, in order to finance a "special restoration fund for abandoned mining sites" over the course of the next 10-15 years. Finally, to ensure the quality of the restoration work, we recommend the establishment of a "performance assessment" that would take the form of an evaluation both pre- and post-restoration, where the primary objective is to eliminate all residual eco-toxicity as well as the complete restoration of ecological and social services⁹⁵.

The problem of "high volume - low grade" open pit mining

In reality, neither the *Mining Act* nor the *Regulation Concerning Mineral Substances Other Than Petrol, Natural Gas And Brine*, nor the *Quebec Mine Site Rehabilitation Guide*⁹⁶ provide for any specific or mandatory measures concerning the full and complete rehabilitation of « high

⁹² All are situated in Abitibi-Témiscamingue and northern Quebec

⁹³ Certain cases are the object of a subsequent analysis on behalf of the Coalition "Pour que le Québec ait meilleure mine!"

⁹⁴ Auditor-General of Quebec, 2009, p. 2-20 to 2-24

⁹⁵ This type of evaluation is necessary in light of the recent results of the research in the field;: Couillard, Courcelles, Cattaneo and Wunsam, *A test of the integrity of metal records in sediment cores based on the documented history of metal contamination in Lac Dufault (Quebec, Canada)*, *Journal of Paleolimnology* 32: 149-162, 2004; Cattaneo, Couillard, Wunsam and Courcelle, *Diatom taxonomic and morphological changes as indicators of metal pollution and recovery in Lac Dufault (Quebec, Canada)*, *Journal of Paleolimnology* 32: 163-175, 2004.

⁹⁶ Service des titres d'exploitation (MRNF), [Guide et modalités de préparation du plan et exigences générales en matière de restauration des sites miniers au Québec](#), 1997.

volume-low grade» open pit mines⁹⁷. The full impact of these types of mines (including local regional impacts such as: water table levels and quality, energy use, chemical reagent use, greenhouse gas emissions etc.) exceeds that of underground mineral exploitation and raises important fundamental ethical concerns relating to the type of mining development that is promoted in Quebec⁹⁸.

Many citizens and organizations fear an increase in open-pit mines throughout Quebec in the coming years; and they fear that they will have to suffer the negative effects this will have on their quality of life. Among other things, they worry that the future use of these types of mines will eventually become attractive sites for industrial and residential waste.

The *Guideline for preparing a mining site rehabilitation plan and general mining site rehabilitation requirements* specifies that “if it is economically and technically possible, excavations must be filled in”, including open pit mines⁹⁹. However, the guide is not enforceable under the law¹⁰⁰, and its recommendations have limited influence over mining companies. Only the *Regulation regarding the application of the Environment Quality Act* requires that open pit mining projects must contain a rehabilitation plan¹⁰¹. Yet, this regulation is insufficient insofar as it contains no specific measure requiring the complete backfilling and rehabilitation of excavated pits.

The complete backfilling and restoration of pits created by open-pit mines would not eliminate the intense socio-environmental impacts associated with this type of mining. Nevertheless, it would promote the reduction of negative effects on the local and regional landscape and reduces the risks of contamination to the environment in the long run by confining mining wastes to a more secure area. In addition, it would ensure supplementary economic benefits for the affected regions, with jobs and additional investment to carry out the rehabilitation. As an example, the complete rehabilitation of the open pit project at Canadian Malartic, if it were to be completed, would permit the rehabilitation of the landscape and the renewed use of the territory for other purposes, while generating a dozen supplementary jobs for 8 to 12 more years, as well as additional investments in the order of 100 to 150 million dollars for the region¹⁰². These are benefits that would be important for the local and regional economies.

⁹⁷ Includes gold and base metal (copper, zinc, nickel, etc.) open pit mines where the output is generally less than 1 gram per ton of minerals extracted in the case of gold, or 1% in the case of base metals; this does not include, however, iron mines where the output is generally at or above 30%. At this stage, other studies are necessary to evaluate the necessity of restoring open pit mines that are « high volume, high grade » such as iron mines.

⁹⁸ Coalition *Pour que le Québec ait meilleure mine!*, [Pour un développement responsable de nos ressources: Non aux méga mines à ciel ouvert \(Partie I et Partie II\)](#), memorandum presented to the Bureau d'audiences publiques sur l'environnement (BAPE), 2009, annexe 9.

⁹⁹ Section 3.5.2, *Guideline for preparing a mining site rehabilitation plan and general mining site rehabilitation requirements*.

¹⁰⁰ *ibid.*

¹⁰¹ Article 7-9, *Regulation Respecting the Application of the Environment Quality Act*

¹⁰² Golder Assosiiés Ltée, [Mémorandum technique du 19 décembre 2008](#) and [Mémorandum technique du 25 mars 2009](#), available online on the [BAPE](#) website.

Proposed Reforms:

4.1 Financial Security of 100% for the Complete Rehabilitation of Affected Sites

Whoever intends to proceed with mining exploitation or intermediate or advanced exploration work must submit to the government a rehabilitation plan and a financial guarantee that ensures the rehabilitation and complete naturalization of the affected mining site prior to commencing any work.

Financial security of 100% covering the entirety of the affected sites

The financial security must correspond to 100% of the evaluated costs to execute the rehabilitation work, on the entirety of the affected sites, including waste disposal areas (tailings ponds, waste rock etc.), roads, buildings and all other parts of the land affected by exploration or exploitation work.

Security paid prior to start of any work

The financial security is payable at the latest 30 days prior to the start of any intermediate or advanced exploration work and all mining work.

Preliminary deposit of 50% of the security for mining exploitation work

In the case of mining exploitation, at least 50% of the total amount of the security must be paid to the government prior to the beginning of any work. The remainder of the security must be paid within 3 years of the commencement of any work.

Preliminary deposit of 100% of the security for work lasting less than 3 years

Where exploration or exploitation work have an estimated lifespan of less than 3 years, or if the ministry deems it necessary, 100% of the amount of the security must be paid prior to the commencement of any work.

Reimbursement of the financial security

The amount of the security retained by the state shall be reimbursable on an annual basis, as the rehabilitation and naturalization work are completed and have been inspected, and once a certificate attesting that the quality of work has been issued by the MSDEP and the MNRF. The quality of the work must satisfy a « performance assessment » test which seeks to eliminate all residual eco-toxicity as well as the complete rehabilitation of ecological and social services.

[Reform and add to Mining Act, chapter IV, section III; Reform Regulation concerning mineral substances other than petrol, natural gas and brine, chapter IX, section III]

4.2 Backfilling and Rehabilitation of High Volume, Low Grade Open Pit Mines

Whoever intends to proceed with the exploitation of a high volume, low grade open pit mine¹⁰³ must submit to the state a rehabilitation plan and a financial guarantee that ensures the complete rehabilitation of the open pit mine prior to commencing any work.

[Reform and Add Mining Act, chapter IV, section III; Reform Regulation concerning mineral substances other than petrol, natural gas and brine, chapter IX, section III]

4.3 Conditional Environmental Authorisation with the Approval of the Financial Guarantee

Whoever intends on proceeding with mining work or intermediate or advanced exploration work must obtain a certificate of authorization from the MSDEP, in conformity with the

¹⁰³see supra note 97 and 98, p.25

Environment Quality Act and the recommendation at section 2.2. of this document. Obtaining this certificate is conditional on the approval of the rehabilitation plan and the financial guarantee by the MSDEP as well as payment of the financial guarantee, as per the conditions set forth in section 4.1 above.

[Add to Mining Act; Reform of articles 1, 2 et 3 Regulation regarding the application of the Environment Quality Act, section I]

4.4 Details of Rehabilitation Plan and Financial Guarantee to be Made Available to the Public

The rehabilitation plan, the evaluation of the costs of rehabilitation, the total amount of the financial guarantee and the state of the payments of the guarantee to the state shall be made available to the public. This information shall include the environmental impact study and shall be submitted to public consultation for all mining exploitation work and for certain advanced exploration work, in conformity with recommendations 2.3 and 2.4 of this document. They shall also include the environmental authorisation certificate issued by the MSDEP for intermediate and advanced exploration work, in conformity with the *Environment Quality Act* and recommendations 2.2 and 4.3 of this document.

*[Add to Mining Act; Add Environment Quality Act, chapters I and II;
Add to Regulation regarding the evaluation and examination of environmental impacts]*

4.5 A Special Levy of 0.5% to Help Pay Off the Environmental Debt of Abandoned Mine Sites

Establish a temporary special levy of 0.5% of the net value produced by mining companies in order to finance a « special restoration fund for abandoned mining sites in Quebec »

[Add to Mining Act; Add to Loi sur les droits miniers]

5. BANNING URANIUM EXPLORATION AND MINING IN QUEBEC

The reform of the *Mining Act* must address the questions surrounding the exploration for uranium and its exploitation. Currently, uranium is considered an ordinary substance within the legislative framework of Quebec. In effect, there are no specific regulations to limit or prevent uranium exploration and exploitation in Quebec. This is of concern given that many scientists agree that the effects of extracting uranium are extremely problematic in the medium and long term. This is principally due to the fact that uranium mines generate massive quantities of radioactive mining residue that must be stored on site, creating permanent risks of contamination¹⁰⁴.

Non-regulated environmental and health risks

Mining residue from uranium mines can contain up to 85% of the initial radioactivity of the mineral, notably due to the presence of a number residual radioactive elements that are not recovered throughout the treatment process. Unfortunately, the radioactivity of several of these elements endures for thousands of years. The two principal methods of confining residue from uranium mines are backfilling into excavated open pits and disposal into impoundment areas built for this purpose. Both of these techniques face technical and environmental challenges that have yet to be tested in the long term, and the risks of contamination via leaks or breaches are of real concern. For example, the *Wise Uranium Project* reports that more than 88 major breaches and leaks have been produced internationally since the 1960's, among which 20 or so occurred over the last 10 years, six of which were in the United States, four in Western Europe and two in Canada¹⁰⁵.

With regards to human health, two recent independent studies, conducted in France and in Canada, demonstrate a 20% increase in the risk of uranium mine workers contracting lung cancer. This increase persists even if when extenuating circumstances are taken into account, such as whether the worker was a smoker or not¹⁰⁶. Once inhaled in the lungs, radon gas and other radioactive dust particles from uranium mines emit alpha and beta rays for several years, damaging the living tissue and cells.

¹⁰⁴ For a general overview, see: International Atomic Energy Agency(IAEA), [The long term stabilization of uranium mill tailings: Final report of a coordinated research project 2000-2004](#), 2004; Coalition *Pour que le Quebec ait meilleure mine!*, [Demandons un moratoire sur l'exploration et l'exploitation de l'uranium au Quebec](#), 2009; Gordon Edwards (Regroupement pour la surveillance du nucléaire), [Speaker's note for the Nunavut Planning Commission](#), 2008; Université de Sydney, [Life-Cycle Energy Balance and Greenhouse Gas Emissions of Nuclear Energy in Australia. Integrated Sustainability Analysis](#), 2006.

¹⁰⁵ See www.wise-uranium.org/mdaf.html; See also: International Atomic Energy Agency, 2004; Aubertin, Bussière et Bernier, 2002; Bussière, [Colloquium 2004 : Hydrogeotechnical properties of hard rock tailings from metal mines and emerging geoenvironmental disposal approaches](#), Canadian Geotechn. Journal, vol. 44 : 1019-1052, 2007.

¹⁰⁶ Klervi Leuraud (Institut de Radioprotection et de Sûreté Nucléaire), [Étude épidémiologiques sur les mineurs d'uranium en France](#), présentation au Forum d'information sur l'exploration et l'exploitation de l'uranium, 2009 ; Patsy Thompson (Commission canadienne de sûreté nucléaire), [L'uranium et la santé des travailleurs: Étude Eldorado 50 ans](#), présentation au Forum d'information sur l'exploration et l'exploitation de l'uranium, 2009.

With regards to exploration work, the risks of radioactive contamination are lesser, but still of concern. There is significant uncertainty surrounding the extent and significance of impacts of exploration on the release of radioactivity to the surrounding soil, air and water. It would also be illogical to continue allowing the exploration for uranium if Quebec proceeds with a ban on its exploitation or use based on environmental, health and ethical grounds.

Uranium bans and control measures established elsewhere in Canada

A number of provinces and territories in Canada and internationally have adopted preventative measures concerning the uranium sector. Nova Scotia and British Columbia are among the provinces that have already announced a moratorium on uranium exploration and exploitation on their territory¹⁰⁷. These two provinces have also recently confirmed that they support enforcing the moratorium through specific legislative measures¹⁰⁸. The regulation in Nova Scotia requires that when a business accidentally finds elevated concentrations of uranium while engaged in exploration work seeking other minerals, they must immediately advise the government and abandon their mining work¹⁰⁹.

Municipal mobilization and joint demands in Quebec

Given the documented concerns of Quebecers in the Outaouais, the Laurentians and the North Shore of Quebec the current regulation of uranium exploration is completely inadequate. In these regions, 20 municipalities, First Nations communities, and public institutions have already expressed their support for a moratorium on the exploration and exploitation of uranium¹¹⁰. In addition to these voices are the approximately 50 social and environmental organizations¹¹¹, as well as the Parti Québécois, Quebec Solidaire and a number of members of the Bloc Québécois. Collectively, these communities and organizations represent hundreds of thousands of individuals in Quebec who are demanding that Quebec follow the example of British Columbia and Nova Scotia.¹¹²

¹⁰⁷ British Columbia Ministry of Energy, Mines and Petroleum Resources, [Strengthens position against uranium development](#), mars 2009; *Mineral Resources Regulations* (N.S. Reg. 222/2004); *An Act to Enforce a Moratorium on Uranium Mining in Nova Scotia*; See also: <http://thechronicleherald.ca/Front/9013633.html>.

¹⁰⁸ Ibid.

¹⁰⁹ Article 74, *Mineral Resources Regulations* (N.S. Reg. 222/2004)

¹¹⁰ Including in particular, in the North Shore region: the City of Sept-Îles, the band council of the Uashat mak Mani-Utenam First Nation, the Municipality of Rivière-au-Tonnerre, the health centre of Sept-Îles. In the MRC d'Antoine-Labelle and the Laurentians: the municipalities of Rivière Rouge, Chute-St-Philippe, Ferme-Neuve, Lac-Saint-Paul, Lac-du-Cerf and Lac Supérieur. In the MRC des Collines de l'Outaouais: the municipalities of La Pêche, Chelsea and Cantley, as well as the council of mayors of the Collines de l'Outaouais.

¹¹¹ See in particular: Coalition *Pour que le Québec ait meilleure mine!*, [Demandons un moratoire sur l'exploration et l'exploitation de l'uranium au Québec](#), 2009, p.10.

¹¹² These claims are made to echo those expressed by more than 15 Ontario municipalities, a number of which are situated in the great Ottawa River and St. Lawrence River watersheds, not far from the border with Quebec, such as the cities of Ottawa, Kingston, and Perth. See among others: <http://ottawa.ca/calendar/ottawa/citycouncil/occ/2008/02-27/cpsc/reportindex19A.htm>, <http://www.cbc.ca/canada/ottawa/story/2008/02/27/ot-uranium-080227.html> et <http://pgs.ca/wp-content/uploads/2008/04/press-release-eng-april-21-doc.pdf>.

We support this recommendation, notably in order to respect the rights of the population to health and quality of life, as well as the protection of the environment, as it is promoted by the *Environment Quality Act* and the *Sustainable Development Act*¹¹³. A moratorium would also permit the respect of the principles of prevention, precaution, and intergenerational equity between present and future generations¹¹⁴.

Proposed Reforms:

5.1 Moratorium on the Exploration and Exploitation of Uranium in Quebec

The exploration and exploitation of uranium are prohibited in the territory of Quebec. Whoever accidentally finds uranium through exploration or exploitation work while seeking other mineral substances must immediately advise the MNRF. If uranium is found with a concentration of more than 100ppm (0.01%)¹¹⁵, work must be immediately stopped and the complete rehabilitation of the site must be carried out.

[Add to Mining Act, chapter II]

¹¹³ Article 19.1, *Environment Quality Act*; Article 6 a), *Sustainable Development Act*

¹¹⁴ Article 6 b), i), j), *Sustainable Development Act*

¹¹⁵ Note that this is the same concentration as provided for under article 74 of Nova Scotia's, *Mineral Resources Regulations*.

About la coalition Pour que le Québec ait meilleure mine!

The Coalition Pour que le Québec ait meilleure mine! was founded in the spring of 2008 and today is made up of more than a dozen organizations, representing many thousands of members across Québec. The coalition's mandate is to redefine how the Quebec mining sector operates by promoting better social and environmental practices. Coalition members believe that a constructive dialogue with various stakeholders, the government, and affected communities and citizens is essential to this process. Ecojustice is a founding member of the Coalition.

ecojustice.ca

Ecojustice, formerly Sierra Legal Defence Fund, is Canada's leading non-profit organization of lawyers and scientists devoted to protecting the environment. Since 1990, we have helped hundreds of groups, coalitions and communities expose law-breakers, hold governments accountable and establish powerful legal precedents in defence of our air, water, wildlife and natural spaces.



Printed on 100% post-consumer recycled, chlorine-free and acid-free paper.