



Reforming the Mining Law of the Northwest Territories

Barry Barton

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FOREWORD

The Canadian Arctic Resources Committee (CARC) embarked upon a research and advocacy initiative in 1995 known as the Northern Minerals Program (NMP). This series of Working Papers sets out the results of the research that was undertaken as part of this program. We are grateful to the following foundations for providing financial assistance in one form or another over the duration of the NMP.

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CARC has examined mineral development across the North for many years. Most of this work focussed on environmental and socio-economic impacts and benefits, and conformity with law and policy. The NMP envisioned a more proactive approach to linking sustainability and mining across the North. In particular, the NMP has taken aim at the manner in which current policies, regulation and monitoring practices reflect the principles of sustainability. As well, CARC examined the challenges and opportunities that 'impact and benefits agreements' bring to Aboriginal governments.

The following is a list of the NMP Working Papers (an order form for these publications is found at the end of each paper).

1. "Mine Reclamation Planning in the Canadian North" by Brian Bowman and Doug Baker.
2. "Aboriginal Title and Free Entry Mining Regimes in Northern Canada" by Nigel Bankes and Cheryl Sharvit.
3. "Reforming the Mining Law of the Northwest Territories" by Barry Barton.
4. "Thinking About Benefits Agreements: An Analytical Framework" by Janet Keeping.
5. "A Guide to Community-Based Monitoring for Northern Communities" by Brenda Parlee.
6. "The Free Entry Mineral Allocation System in Canada's North: Economics and Alternatives" by Malcolm Taggart.
7. "Aboriginal Peoples and Impact and Benefit Agreements: Report of A National Workshop" by Kevin O'Reilly and Erin Eacott.

These papers are 'works in progress'; much of the research continues. While we believe that the findings offer important opportunities for reform, the views and opinions presented are those of the authors and do not necessarily reflect those of CARC.

CARC will continue to press for changes to mining practice and policy. The findings and recommendations in these papers will be used by CARC to build an agenda for major reforms to northern mining law, better environmental management of mineral development, and fairer relationships amongst northern communities, governments and the mineral industry.

**REFORMING THE MINING LAW OF
THE NORTHWEST TERRITORIES:
A COMPARISON OF OPTIONS**

**Prepared for the
Canadian Arctic Resources Committee**

Barry Barton

1998

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ABOUT THE AUTHOR

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PART I: INTRODUCTION

Mineral rights in the Northwest Territories are issued under the Canada Mining Regulations. The way that they are issued plays a role in environmental and resources policy that is attracting increasing interest. This paper aims to contribute to discussion by comparing the existing law with some of the possible alternatives to it. Comparison sheds light on the strengths and weaknesses of the different possibilities for reform, and it also sharpens our understanding of the effects of the existing system. The five different systems of mineral disposition selected for this purpose are:

1. The Present System: Free Entry
2. The Present System Plus: Modified Free Entry
3. Administrative Title
4. Mineral Leasing
5. Mineral Concessions

The present system is therefore considered alongside the others, but inevitably in more detail because it is an existing system in the Northwest Territories, rather than a hypothetical, and because it provides necessary background. The other four are described in sufficient detail to permit a discussion of their strengths and weaknesses. The description includes their more important variations, and draws on experience with them, where it is available, from elsewhere in Canada and from other countries.

These five systems are evaluated under seven criteria, or groups of criteria:

1. Security of Title
2. Efficient Procedures
3. Proper Return to the Crown
4. Minimal Harm to Land in Acquiring Title
5. Appropriate Decision-Making Powers
6. Integration of Legislation
7. Local Benefits and Other Societal Purposes

Any selection of criteria for evaluation is vulnerable, of course, to criticism for the assumptions and preconceptions that it exposes. The selection made here should at least give an opportunity to cover most of the issues that arise in debate among mineral industry participants, local people, conservationists, and government personnel. They will allow for a systematic review of the strengths and weaknesses of the present system and of the main alternatives to it. No recommendations will be made that one or another system of mineral title is the best, or that one or another reform must be implemented.

The study is concerned with the Crown-owned minerals in the Northwest Territories that are available for exploration and development under the Canada Mining Regulations. The Regulations define the

minerals to which they apply; metallic minerals, diamonds and other hardrock minerals, but not oil and gas, coal, carving stone, sand and gravel or certain other substances. Much of the discussion raises issues that are also significant in other jurisdictions. The free entry system is used for mineral dispositions in Yukon and in all the provinces except for Alberta, Nova Scotia and Prince Edward Island. Many of the questions that free entry poses for environmental and land use administration are also important in the United States and Australia.

The study is prompted and overshadowed by the momentous changes that are now under way in the north. Aboriginal land claim settlements have been reached in the Inuvialuit, Nunavut, Gwich'in and Sahtu regions. Mineral ownership in significant areas within these regions has been, or will be, vested in aboriginal owners rather than the Crown, so that the Canada Mining Regulations will no longer apply there. Other, larger, areas will be vested in aboriginal owners as to the surface, while the minerals remain with the Crown. There, the Canada Mining Regulations continue to apply, but the overall regime of land use management, environmental protection, project review, surface rights and local benefits is very different. Another change is the establishment of Nunavut Territory in 1999, in the eastern part of the present Northwest Territories. This study will continue to refer to the Northwest Territories without intending any special reference to their impending division. A third issue is the possibility of devolution of powers from the federal government, chiefly the Department of Indian Affairs and Northern Development, to the territorial governments. The administration of the Canada Mining Regulations is now in the hands of DIAND. This study will intend no special distinction when it speaks of the Crown, the Minister, the agency or the department.

Many of the ideas that are discussed in this study derive from administrative law, the law concerning the use of public power and authority in society, especially its use by governmental agencies under statute. While some administrative law is concerned with procedural duties, there is also a substantial branch that is concerned with discretionary powers of decision. An agency or an official like the Minister or the Mining Recorder has a discretionary power of decision if an Act of Parliament or a Regulation gives him, her or it the power to decide what to do. It may be a decision to grant an application for a mining right, to refuse it, or to grant it subject to conditions. Any one of these decisions is lawful so long as it is within the boundaries of the power that the legislature has set. At times it can be easy to see where these boundaries lie, and at other times it can require a difficult inquiry into the proper purposes, proper factors and so forth that the legislature contemplated. Law reform requires one to think about what discretionary powers should be conferred on different officials, and (particularly important) how a discretion should be designed, so that the official has enough power to carry out the work in hand, but not so unrestricted and unconfined a power that it causes others undue uncertainty about how it will be exercised.¹

¹ Much of the basic thinking about the design of discretionary powers goes back to K. C. Davis, *Discretionary Justice: A Preliminary Inquiry* (Baton Rouge: Louisiana State Univ Press, 1969). Standard administrative law works are J. M. Evans, H. N. Janisch, D. J. Mullan, R. C. B. Risk, *Administrative Law: Cases, Text and Materials*, 4th ed.,

Another recurrent theme is the relationship between the mineral title law and the environmental and land use law. (The latter includes an enormous range of legislation on water and air pollution, wildlife protection, site rehabilitation, environmental impact assessment, and the like; and legislation concerning the use of Crown lands, including aboriginal land claim issues.) Mineral activity can often be accommodated successfully with other land use concerns such as environmental protection, aboriginal rights and local benefits. Most companies pride themselves on maintaining high standards in their operations. Mineral reconnaissance and exploration usually make slight intrusion on the land, and where the intensity of the intrusion increases, in advanced exploration and mine development, the area affected is relatively small. But mineral activity naturally entails adverse impacts. To what extent should they be controlled under the mining law, and to what extent should it be done under the environmental and land use law? Terms and conditions to control impacts could be imposed under either of them, although in fact it is most often under the latter. But the environmental and land use law is stretched in those cases, perhaps isolated cases, where no exploration or no mine is possible without major environmental compromise; where state-of-the-art pollution control and mine design will not be enough. These harder cases turn attention to the granting of mineral title to companies in sensitive places.

PART II: FIVE DIFFERENT DISPOSITION SYSTEMS

1. THE PRESENT SYSTEM: FREE ENTRY

Because most Canadian mining laws are historically related, the Canada Mining Regulations² that apply in the Northwest Territories are similar to the legislation that governs mineral activity in most other jurisdictions in Canada.³ The federal Territorial Lands Act⁴ contains little detail on mineral activity. It is the general empowering Act under which the Canada Mining Regulations are made. The Regulations apply to hardrock minerals, as previously mentioned, rather than oil and gas. They deal with Crown-owned minerals, and not privately-owned minerals. However there is very little if any private mineral ownership in the Territories, other than the lands where mineral rights are vested in aboriginal owners pursuant to the land claim agreements.

As a preliminary, the Regulations require a person to obtain a “licence to prospect” in order to prospect for minerals, record a claim, or acquire an interest in a claim: sections 7-10. This licence is freely available on application by any individual over 18 years of age or any company registered in the Territories. There are no requirements for training or technical competence. The only case for refusal is an individual or company who held a licence that was revoked under section 10(3) within the previous 30 days for willful contravention of the Regulations: section 7. In any other case, on receipt of an application and the applicable fee, “the Mining Recorder shall issue to the applicant a licence”: section 8(2). The result is that apart from a thirty-day stand down period the department has no control over who may explore and stake claims. For that matter, the power to revoke a licence is limited; it can be exercised only for a breach of the Canada Mining Regulations. A contravention of other legislation does not give grounds, nor does a criminal conviction for such a contravention.

The holder of a licence to prospect has a general right to enter and locate (i.e. stake) claims on lands, other than lands within certain classes or specifically withdrawn. Section 11(1) states this and then continues to list the lands that are not open.

Subject to any regulations made under the Territorial Lands Act, a licensee may enter, prospect for minerals and locate claims on lands other than lands

- (a) to which the National Parks Act applies;
- (b) used as a cemetery or burial ground;
- (c) in respect of which a claim has been recorded and has not lapsed;

² C.R.C. 1978 c. 1516.

³ B. J. Barton, “The Future of the Free Entry System for Mining in Canada’s North” in M. M. Ross and J. O. Saunders (eds), *Disposition of Natural Resources: Options and Issues for Northern Lands* (Calgary: Canadian Institute of Resources Law, 1997), (hereafter Barton, Future of the Free Entry System) p. 81.

⁴ *Territorial Lands Act*, R.S.C. 1985, c. T-7.

- (d) the minerals in which have been granted or leased by Her Majesty;
- (e) set apart and appropriated by the Governor in Council for any purpose described in section 19 of the Territorial Lands Act; [now section 23]
- (f) the entry on which for the purpose of prospecting for minerals and locating a claim thereon is prohibited by order of the Governor in Council, subject to the terms and conditions contained in the order;
- (g) under the administration and control of the Minister of National Defence, the Minister of Energy, Mines and Resources or the Minister of Transport, unless the consent of that Minister has been obtained in writing;
- (h) the surface of which has been granted or leased by Her Majesty, unless the grantee or lessee consents thereto or an order authorizing entry thereon has been made pursuant to subsection 72(3) ...

The power described in section 11(1)(f) is actually conferred on the Governor in Council by section 23 of the Territorial Lands Act: “The Governor in Council may (a) on setting out the reasons for withdrawal in the order, order the withdrawal of any tract or tracts of territorial lands from disposal under this Act ...”.⁵ This is an important and wide discretionary power to reserve or withdraw lands from mineral entry. In addition, section 11(1)(e) of the Mining Regulations describes other discretionary powers to set apart and appropriate lands for particular purposes (including town sites and aboriginal treaty obligations) under other parts of section 23 of the Territorial Lands Act. Other parts of section 11(1) of the Mining Regulations withdraw lands automatically by reason of their use or status.

On lands open for mineral entry, section 12 authorizes the staking or locating of claims: “Subject to these Regulations, a licensee or a person authorized by a licensee may, in accordance with section 13, locate mineral claims ...”. A claim has a minimum size of 51.65 acres and a maximum of 2,582.5 acres - 50 times as big: sections 12-23. The claim is to be square or rectangular, aligned north-south-east-west, and the sides are to be 1,500 feet or a multiple thereof. The claim is located by erecting a “legal post” at each corner and at 1500-foot intervals along the boundary. In lieu of a post, a tree found in position may be cut to size. Where there are no trees, a mound or cairn may be used. Details are to be inscribed on the corner posts, usually on identification tags issued by the Mining Recorder. On the post in the north-east corner, full details are to include the name of the claim, the name and licence to prospect number of the locator, the name of the person actually locating the claim if it is some one else, and the time and date of the location. The boundaries must be marked so that they can be followed throughout their entire length, or, where it is not possible to mark the entire length, along so much of the length as possible: section 16. In treed areas, the lines are to be marked by blazing trees and cutting underbrush. In treeless areas, they are to be marked either by placing posts at least 4 feet high, or by making mounds of earth or stone at least 18 inches high and 3 feet in diameter at the base: section 16(2).

⁵ See *Halferdahl v Canada (Recorder of Whitehorse Mining District)* [1992] 1 F.C. 813 (C.A.).

Other provisions permit witness posts to be used to locate inaccessible ground (such as land covered by water or ice), and allow for the staking of irregularly-shaped claims that abut existing claims.

The locator of a claim then has 60 days from the location of the claim in which to record it at the office of the Mining Recorder of the mining district within which the claim is situated: section 24. Where the Recorder is satisfied that all the requirements of the Regulations have been complied with, he or she “shall” record the claim: section 24(3). Neither the Recorder nor any other official has a discretion to refuse. The Recorder can, and must, refuse to record the application if it is determined that it is not in accordance with the Regulations. The failure to comply may be in the manner of staking, or it may be that the land is not open for mineral entry, having been withdrawn or belonging to one of the classes automatically closed by section 11(1). Even in these cases, once the facts are ascertained, the Recorder has no discretion, and must do what the law requires.

Also available under the Canada Mining Regulations is a “permit to prospect,” which is intended to facilitate modern reconnaissance and exploration techniques by allowing large areas of land to be secured for a limited time: sections 29-36. It is issued at the discretion of the Director of Mining Management and Infrastructure, where exploratory work of value will be undertaken and the granting of a permit will not hinder other mining interests: section 29(10). The permit to prospect gives exclusive rights to explore and to stake claims during its term (three years in the southern parts of the Territories, five in the northern). Applications are filed in December in each year, and permits are issued in January. Where there are multiple applications for one piece of ground, priority is by time of application. The size of a permit to prospect varies according to a complicated scale depending on the latitude, ranging between 20,000 acres and 71,000 acres: section 29(1) & Schedule V. A permit is not available in the more frequently explored region around Great Slave Lake.⁶

In order to maintain a claim, a certain amount of exploration work, known as representation work (or assessment work) must be carried out on it: sections 38-42, Schedule II. During the first two years following recording, work to a value of at least \$4 per acre must be performed, and in each subsequent year work to a value of at least \$2 per acre. A statement of the representation work done must be filed with the Recorder within thirty days of the anniversary date of the recording of the claim. Otherwise the claim lapses and is open to staking by other persons. Ancillary provisions allow for credit for work done off the claim, for work to be carried forward to subsequent years, for claims to be grouped, for extensions of time to be granted, and for certificates of work to be granted.

A recorded claim gives the holder the exclusive right to prospect for minerals and develop any mine on the land enclosed within the boundaries of the claim, but the claimholder may not remove minerals over a value of \$100,000 per annum, other than for such assay or testing purposes as the Minister may

approve: section 27. A claim does not entitle its holder to erect any dwelling, mill, concentrator or other mine building; or to create any tailings or waste disposal area in connection with the commencement of production from a mine: section 27(3). The maximum term of a claim is ten years, if representation work is properly done and recorded.

At this point, the Territorial Land Use Regulations⁷ should be brought into the picture, because they provide the main regulatory controls over the operations of claim holders and other explorationists. They prohibit the performance of identified kinds of work or undertaking on Crown lands⁸ without a Class A or a Class B Permit issued by the engineer, a DIAND official. A Class A Permit is necessary for work that involves (in brief) any of the following: use of more than 150 kg explosives in 30 days; use off-road of any vehicle over 10 t weight; use of a drill over 2.5 t; a campsite for more than 400 person-days; fuel storage over 80,000 litres; use of earthmoving machinery; use of stationary machinery for hydraulicking or earthmoving; or line cutting over 1.5 m in width and over 4 ha in area: section 8. A Class B Permit is necessary for lower levels of the same kinds of work. When a permit is applied for, the engineer may issue or refuse to issue the permit: sections 24 & 27. Although the engineer is subject to time limits in making the decision, and an obligation to give reasons where refusing an application, it is clear that he or she possesses a broad discretion to decide either way. The matters to be taken into account in exercising it are not stated either in the Regulations or the Territorial Lands Act under which they are made. However, it must be exercised in a way that pursues a general purpose, which may be divined from the Act, of protection of the ecological balance and physical characteristics of areas.⁹ Permitting is backed up with provisions for special terms and conditions, security deposits, inspections, reports and final plans.

The Territorial Land Use Regulations therefore control much use of land for mineral exploration purposes. They are limited in certain respects, however. Section 6 provides: “These Regulations do not apply to ... anything done in the course of prospecting, staking or locating a mineral claim unless it requires a use of equipment or material that normally requires a permit.” While this may be almost

⁶ The area excepted is bounded by 60 and 65° N and 107 and 120° W: s. 29(1). Lac de Gras is in this area, and so is the southernmost part of Contwoyto Lake, but Great Bear Lake is not.

⁷ C.R.C. 1978 c. 1524. There is no equivalent for the NWT of section 3(3) of the Territorial Lands Act, which states that nothing in it (or regulations under it) shall be construed as limiting the operation of the Yukon Quartz Mining Act or the Yukon Placer Mining Act.

⁸ They apply to “territorial lands” ie lands in the Territories that are vested in the Crown and are under the control of the Minister of Indian Affairs and Northern Development: s. 2.

⁹ The Act permits the Governor in Council to set aside any territorial lands as a land management zone where necessary for the protection of the ecological balance or physical characteristics of any area: s. 4. This indicates a clear purpose of conservation. For such zones the Governor in Council may make regulations respecting the protection, control and use of the surface of land, and the issue of permits for land use: s. 5. There is scant indication of purpose here, however. The Territorial Land Use Regulations declare the whole of the Yukon Territory and the Northwest Territories to be set apart as land management zones: s. 3.

superfluous, it confirms that the acts of prospecting and staking do not in themselves require a permit.¹⁰ The more distinct limitation is the range of activities for which no Class A or Class B Permit is required. An explorationist can avoid permit requirements altogether by staying below the lower end of activity that requires either a Class B Permit. He or she would need to stay below all of the following maxima: no more than 50 kg explosives in any 30-day period; no off-road vehicle over 5 t; no vehicle that exerts pressure on the ground over 35 k pa; no power drilling machinery weighing over 500 kg (excluding rods, stems, bits, pumps and other ancillary equipment); no campsite for more than two people for more than 100 person-days; no petroleum storage over 4,000 litres, no single fuel container over 2,000 litres; no cut lines over 1.5 m wide; and no earthmoving machinery, whether self-propelled or stationary. While it is true that many exploration programs, especially at an advanced stage, will exceed these limits and will require a permit, it is likely that significant land use and environmental impact can occur outside the reach of the Territorial Land Use Regulations.

Where exploration has been successful, the Canada Mining Regulations provide for a mining lease. If the holder of a claim wishes to go into production of more than \$100,000 value of minerals per annum, or wishes to hold the ground longer than ten years, he or she must apply for a lease: section 58. The application must be made not later than thirty days after the tenth anniversary of the recording of the claim. Once the holder of a recorded claim makes a proper application, he or she “shall be granted a lease of that claim by the Minister”: section 58(2). The requirements of a proper application will not normally be obstacles to a serious applicant. The applicant must have recorded representation work to a value of at least \$10 per acre, or have undertaken to commence production: section 58(2)(b). This is inconsequential. He or she must have recorded a survey of the claim, section 58(2)(c), a requirement which involves expense but which again is no obstacle to a serious applicant. His or her title to the claim must not be under dispute: section 58(2)(a.1). This is potentially more of a problem, but it concerns third parties and not the government. The remaining requirements are merely administrative matters such as fees and forms.

A lease, once issued, has a term of 21 years: section 59. Section 61(1) states that: “A lease of a recorded claim shall be in such form as the Minister may determine and contain such terms and conditions as may be prescribed by these Regulations and other applicable legislation.” However no form of lease is prescribed, and the Regulations say nothing about the lessor’s, lessee’s or mutual covenants that may be included, except to require an annual rental to be paid, to require royalties to be paid on produced minerals, and to confer rights of renewal on the lessee: sections 59-60, 65-69. Section 61(1) speaks separately about “form” and “terms and conditions”. It is therefore quite possible that the Minister has no power at all to impose terms and conditions. Even where he or she considers that terms and conditions would be desirable (either generally or in the particular case), they may be attacked for going beyond the clear words of section 61(1) and for attempting to reformulate the

¹⁰ “Almost” because it may provide an exemption from section 11 on the notification of small fuel caches. That

character of the mining lease that has in fact been laid down by the Regulations. Terms and conditions on particular topics, such as a requirement for local benefits, could be attacked for being beyond any powers specifically given to the Minister. The matter is considered further in the context of local benefits, below.

The development of a mine will need to comply with a number of environmental and land use requirements. The project will require permits under the Territorial Land Use Regulations, as well as long-term leases for surface facilities. It will be subject to the environmental impact assessment process under the Canadian Environmental Assessment Act.¹¹ If the Minister's decision, most likely after a review panel hearing, is favourable, regulators will issue a number of environmental permits, such as for water intakes and discharges, and waste rock and tailings deposits.

The free entry system embodied in the Canada Mining Regulations has three elements.¹²

(i) Right of entry on lands containing Crown minerals

A miner has the right to enter on any land and carry out prospecting and exploration operations: section 11, above. Thus, anyone seeking to manage use of Crown lands is obliged to accept that mineral exploration is always a legal land use. Arguably, the same goes for most of the land claim settlement lands where the Crown has title to minerals and aboriginal organizations have title to the surface. Entry is therefore freely available. The Territorial Land Use Regulations provide some control of this use of public lands, as discussed above, and therefore restrict the right of entry.

(ii) Right to acquire a claim

The legislation entitles a miner to acquire a claim in order to secure mineral rights over a piece of land, in priority to other miners, by staking a claim: sections 12 and 24(3), above. The miner acquires rights to minerals by his or her own acts in the field, and then in getting the claim recorded; it is self-initiated title, or unilateral appropriation of title to resources. The root of title is the staking, not the recording of the claim by the Recorder - although recording is of course necessary to perfect the title.¹³ This is unusual among schemes for the disposition of resources.

(iii) Right to a lease and to go into production.

The third element of free mining is the right to go from the exploration stage to the production stage. The government does not have any option in the matter, it must issue the lease.

section binds all "persons" rather than "permittees" like most sections in the Regulations.

¹¹ S.C. 1992 c. 37.

¹² B. J. Barton, *Canadian Law of Mining* (Calgary: Canadian Institute of Resources Law, 1993), (hereafter *Canadian Law of Mining*) p. 151.

¹³ *Canadian Law of Mining*, pp. 256-258.

What one should look for in determining whether the legislation embodies the free entry system is not only the language of entitlement, that some one has a right to do something, but also mandatory language aimed at the Mining Recorder or Minister; that the Recorder “shall” record a claim rather than he or she “may” do so. The case law is quite clear that where an official “shall” grant a licence he or she has no discretion and is a mandatory of the statute, and where he or she “may” grant a licence, then the provision is permissive and the power is discretionary.¹⁴

The permit to prospect does not make any substantial alteration to the nature of the free entry system embodied in the Regulations. The general right of entry on Crown lands is not affected, miners still retain the power to locate claims as of right, and the holder of a permit has an exclusive entitlement to acquire claims in the permit area before it expires and thence go to lease.

A disposition of minerals entails three different choices. Under the free entry system, they are made by the legislation. They are so basic to free entry that they scarcely call for comment. It is only when one begins making comparisons with other disposition systems that their significance becomes apparent.

- (i) Whether to make a disposition of minerals. The Regulations make a positive decision to do so, or perhaps make a standing offer which needs only an acceptance by the mineral explorationist to locate a claim or acquire a lease.
- (ii) Who to make a disposition to. The Regulations decide this on the principle of priority by time: first in, first served.
- (iii) What kind of disposition to make. The Regulations decide this, implicitly, by detailing the rights and duties of the holder of a mineral claim in the Regulations. There is no power for the Recorder to impose special conditions. Likewise, mining leases can be issued subject to terms and conditions, but the main ones (land, rent, royalty, term, renewals, forfeiture) are fixed by the application or by the Regulations. The Minister has no clear power to adjust the disposition by imposing particular terms and conditions.

2. THE PRESENT SYSTEM PLUS: MODIFIED FREE ENTRY

The first alternative to consider is a group of modifications that would make slight changes to the existing free entry system. They need not form one unified package, and can be described as separate possibilities.

(a) Map Selection

¹⁴ *Baker v Smart* (1906) 12 B.C.R. 129 (F.C.), *Johnston v Minister of Lands* (1919) 27 B.C.R. 257 (C.A.); *Canadian Law of Mining*, pp. 159-162.

Map selection is also known as map staking or map designation. It is a procedure where mining claims are defined on a map rather than on the ground with posts and blazing of lines. A claim is obtained by making an application for it at the Recorder's office. The application refers to the official maps to describe the block or square of land that is applied for. The Recorder checks that the ground so described is available. (It may be already subject to a claim, or it may have been withdrawn by order in council.) If the block is available, and the application is otherwise in order, the Recorder issues the record of the claim. The Recorder has no power to refuse to issue a claim. The legislation might say: "where the land is open for location, and the application has been made in accordance with these regulations, the Recorder shall issue a record of claim for that land to the applicant." The claim is in force from that moment. The applicant is not required to place legal posts and blaze the boundaries. In fact the applicant may not have visited the ground at all.

Map selection requires a survey or mapping system that has enough detail to enable the smallest possible claim to be readily identified. The system would need to be practical for day-to-day recording and mapping work in the office, and on the ground would need to enable explorationists to ascertain their boundaries reasonably clearly. It would also need to enable surveyors to ascertain boundaries precisely in cases of mine development or of disputes with neighbours. Map selection would impose extra responsibility on the Recorder's office to deliver a dependable recording system for mineral rights, because there would be no evidence left on the land. Map selection would also require amendments to the Regulations for rules to permit challenges by other explorationists, for example for lack of assessment work. (Ontario has a procedure where an application for an overstaked claim is received on a pending or "filed only" basis.¹⁵) There would also need to be a rule to judge the races to the Recorder's office that will occur, for example when claims on desirable ground lapse, or when a land withdrawal is lifted. How are simultaneous applications to be received at the counter? What about faxes? Melees in the Recorder's office have caused major disputes in Western Australia.¹⁶ One solution could be a rule that all applications for the same land that are made on the same day are deemed to have been made simultaneously, and are therefore subject to special rules. The rule could be that the successful application is to be chosen by lot from among all the applications made for that ground, and that no person may be applicant, alone or with others, on more than one application for the ground. Or the rule could be for a choice by competitive tendering, for a cash bonus or a work commitment, as will be discussed shortly under Mineral Leasing.

Map selection is already in use in Canada. Quebec began using it, on an experimental basis, in the area south of the St Lawrence River excepting the Gaspé, and now proposes to extend it to the whole of the rest of the province. In addition, Manitoba and Saskatchewan use it for their more settled southern

¹⁵ Mining Act, R.S.O. c. M. 14, s. 46(2).

¹⁶ *Hot Holdings Pty Ltd v Creasy* (1996) 134 A.L.R. 469, 70 A.L.J.R. 286 (H.C.A.), noted 15 A.M.P.L.A. Bull. 110, 14 A.M.P.L.A. Bull. 15. In the Canada Mining Regulations, ss. 29(5.1) & 29(12) are intended to cover such circumstances in applications for permits to prospect.

areas, their “surveyed areas.” Conversely, in Newfoundland, ground-staking is used on the island of Newfoundland, and map selection in Labrador. There is a hybrid form of staking in surveyed areas of Ontario and Quebec where claims are ground-staked, but must conform to the existing survey block lines.¹⁷

(b) Improved Withdrawals and Land Use Planning

Perhaps the most straightforward and useful modifications that could be made to the existing system are in the withdrawal procedure. The present provisions of the Territorial Lands Act and section 11(1) of the Regulations were described above. They confer a simple and broad, even vague, discretion on the government. It is a blunt instrument; land is either withdrawn or it is not. It could be improved on, to the common benefit of mineral and non-mineral interests.

A procedure could be introduced to ensure open and inclusive consideration of all values concerned. It could be a “notice and comment” procedure, which need not be elaborate but would ensure that proposed withdrawals were publicly notified, so that interested parties would have an opportunity to make submissions on them. Formal hearings would be a possibility but would not be essential. The procedure could allow for urgent withdrawals to be made on an interim basis, subject to subsequent procedure.

Criteria could be introduced that must be fulfilled before the power can be exercised. Less restrictively (but still giving better guidance than at present), the legislation could state what matters can, or must, be taken into account in making withdrawal decisions. For example, the Governor in Council could be required to take into account a set of factors designed to produce sustainable development - the protection and conservation of ecosystems and species, etc., and the reasonable needs of an adequate land base for the exploration for and development of minerals.

The process in which these matters are taken into account could lead to a wider range of outcomes than the present all-or-nothing withdrawal or no withdrawal. A withdrawal could be limited as to time; it could be limited as to the exploration activities permitted; it could be limited so as to prohibit the location of a claim without special permission. In British Columbia, the Mineral Tenure Act empowers the Minister to establish mineral reserves and shows some of these characteristics.¹⁸

Elaboration of the mineral withdrawal process along these lines raises broader questions about land use management and land use planning in the Territories. The land claim settlements, and the new institutions of public government being put in place in Nunavut, will result in major changes in land use

¹⁷ *Canadian Law of Mining*, pp. 22-27.

¹⁸ R.S.B.C. 1996 c. 292 s. 22.

management.¹⁹ It only needs to be observed that developments in those areas should produce legally effective relationships with the mineral disposition system. For example, general land use planning could result in decisions that must be implemented *inter alia* in the terms and conditions that must be attached to mining claims and leases as they are issued.

Attempts to reform the federal American General Mining Law have pursued such improvements to the land use management system. If, as some argue, a leasing system is not appropriate for hardrock mineral prospecting, then an alternative is a comprehensive land use analysis, which would determine which lands were suitable for mineral development of different kinds.²⁰ On some lands relatively easy mineral access would be possible, but on others access may be available for some operations but not others. Just as in Canada, this would be more flexible than a complete withdrawal. However, attempts to bring about reform of the General Mining Law of 1872 do not appear likely to bear fruit any time soon.

(c) Clearer Relations with Environmental Law

The free entry system can be modified in order to clarify and elaborate its relationships with environmental legislation, and to clarify that the environmental legislation is not to be governed by activity or decisions made in the course of disposition of mineral title. Modifications could assert or reassert that:

- Rights under the Mining Regulations are expressly subject to all environmental laws, land use laws and other laws, as in force from time to time, and that the holder of a claim or lease must comply with those laws;
- Rights under the Mining Regulations can be exercised only as and to the extent permitted under those laws; and
- Nothing in the Regulations exempts any person from duties imposed under other laws;
- Where by reason of action under any other legislation, the holder of a claim or lease is prevented from or restricted in doing anything otherwise permitted by these Regulations, there is no right to compensation unless that other legislation specifically provides for it to be payable.

At present the Mining Regulations do not state their relationship with regulatory legislation in a clear way. Section 27(1) provides that the holder of a recorded mining claim has the exclusive right to prospect for minerals and develop any mine subject to other regulations made under sections 4 or 19 of the Territorial

¹⁹ J. Donihee, "Integrative Mechanisms Emerging from Land Claims" in M. M. Ross and J. O. Saunders (eds), *Disposition of Natural Resources: Options and Issues for Northern Lands* (Calgary: Canadian Institute of Resources Law, 1997) p. 248.

²⁰ L. J. MacDonnell, "Mineral Law in the United States: A Study in Legal Change, in L. J. MacDonnell and S. F. Bates (eds), *Natural Resources Policy and Law: Trends and Directions* (Washington, D.C.: Island Press, 1993) p. 66 at 74. Also see D. Werth, "Where Regulation and Property Rights Collide: Reforming the Hardrock Act of 1872" (1994) 65 U. Colo. L. Rev 427.

Lands Act. The only relevant regulation-making power in these two sections is the one in section 19 (now section 23), authorizing regulations respecting the protection, control and use of the surface of territorial lands.²¹ There is no direct reference to the Territorial Land Use Regulations, considered above, and authorized primarily (perhaps exclusively) by sections 4 and 5 of the Act.²² Section 73(2) of the Regulations is a curious, outdated and unhelpful provision, forbidding work on a claim except in accordance with an Act of Parliament, the Regulations, other regulations under the Territorial Lands Act or with the approval of an engineer of mines. Its relationship with the general right under section 27 of the Regulations, and with the Territorial Land Use Regulations, is unclear.

It may be said that there is no need for modifications to state the relationship between the Canada Mining Regulations and land use and environmental law, because mineral operations under the former are already subject to the latter. While this is true in terms of the general reach of the Territorial Land Use Regulations and other legislation such as the fisheries and the water laws, there are factors which indicate that the matter requires more attention. There is a distinct possibility that environmental and land use regulators often assume that they must not use their statutory powers in a way that would prevent the holder of a mineral disposition from enjoying the right to explore or to mine that it confers.²³ *British Columbia v Tener*²⁴ may reinforce the opinion that any regulatory action that affects operations on a mining claim or lease is impermissible as a “regulatory taking.” It may therefore be desirable to make it plain that possession of a claim or a lease does not exonerate the holder from regulatory action to protect environmental values, even if it prevents economic mineral development. Such modifications may help to establish that regulatory actions taken under environmental law have consequences for mineral tenure, rather than the other way around.

Specific changes could also be made to require, or to monitor, compliance with environmental legislation. Some of the possibilities are seen in other jurisdictions.

- The licence to prospect provisions of the Canada Mining Regulations could be changed by extending the grounds for revocation of a licence to include non-compliance with the Territorial Land Use Regulations and other legislation; and revocation could be made a more significant penalty than it is at the present. The standard could be changed from willful non-compliance to some form of strict liability subject to a defence of due diligence.

²¹ Territorial Lands Act, R.S.C. 1985 c. T-7 s. 23(j), added in R.S.C. 1970 (1st Supp.) c. 48 s. 25. Section 4 (now section 8) of the Act is not significant; it authorizes regulations for the sale, lease or other disposal of lands.

²² If the Land Use Regulations are made exclusively under ss. 4. & 5, then s. 27 of the Mining Regulations does not say that the rights of the holder of a recorded mineral claim are subject to the Land Use Regulations.

²³ See below, under Integration of Legislation.

²⁴ [1985] 1 S.C.R. 533.

- The Minister could hold the power to cancel any disposition for which an environmental assessment and review process determines that development should not proceed. This is how the legislation works in Saskatchewan.²⁵
- As an alternative (used in British Columbia), the Regulations could provide that a lessee may not produce any minerals under a mining lease unless the lessee obtains all approvals required under the environmental assessment legislation.²⁶
- As to representation work, British Columbia stipulates that in order to be eligible, the work must have been carried out in compliance with the Mines Act,²⁷ so breaches of that Act such as in respect of reclamation plans could lead to a loss of title. A useful amendment along these lines could go further, so that representation work filings not only show continuing activity and build up the geological knowledge base, but also function as an administrative verification (possibly a public one) that environmental duties have been performed during mineral operations.

(d) Agency to Have Discretionary Power in Specified Cases

Minor modifications can be made to the free entry system by introducing limited opportunities for the Minister, Mining Recorder or other official to take an active role rather than a passive one in the process of disposition of mining claims and leases. The key thing to keep in mind in considering such possibilities is that discretionary powers are not all the same, and while some can be draconian, others can be very restricted.

One modification would be to adjust the process of issuing claims to provide for a referral period to allow for other agencies, especially those concerned with land-use and wildlife, to comment on an application for a recording of a claim. Different consequences could be provided for. The most significant consequence that could be provided would be that the record of the claim would be denied. This would provide protection of non-mineral values. The cost in terms of certainty for explorationists could be moderated considerably by raising the standard that the agency needs to establish in order to be able to take such a step. For instance, the standard could be one of serious risk of damage to non-mineral values; or of clear evidence of such risk. The legislation could maintain the existing duty of the Recorder to issue a record of a claim, leaving the presumption the way it is now, that the claim will be issued, but then adding an “unless” clause stating the exceptional circumstances in which the Recorder may decide against issue.

Another unintrusive modification would be to maintain the existing duty of the Recorder to issue the record of a claim, but to authorize the Recorder to issue it subject to conditions. Again, this power

²⁵Crown Minerals Amendment Act, S.S. 1992, c. 25, s. 5, adding s. 10.1 to the Crown Minerals Act, S.S. 1984-85-86, c. C-50.2.

²⁶Mineral Tenure Act, R.S.B.C. 1996 c. 292, s. 43, inserted by the Mineral Tenure Amendment Act 1995.

²⁷Mineral Act Regulations, B.C. Reg. 587/77, Part C, s. 1(3); Mineral Tenure Act Reg., B.C. Reg. 297/88, s. 19(3).

could be confined in different ways. It could require that the government satisfy a high test in presenting clear evidence of the need for this action. It could be confined to particular purposes. It could be exercised only by particular classes of conditions. Conditions could set out the rules to be followed in exploration work on this particular claim with respect to environment protection, or the time of the year during which work may be done. They could prohibit ground work, or mechanized work, without written consent of the relevant land manager. They could withhold the right to apply to for a mining lease, without the consent of the Minister.

Such a power to withhold the record of a claim or to issue it subject to terms could be conferred so as to be exercisable only at the point of initial application for a record of a claim. Alternatively, it could be exercisable on each occasion of renewal of the claim. It would be reasonable for some compensation or reimbursement to be made for work done in expectation of a renewal, and for credit for representation work to be credited to another claim instead of the affected claim.²⁸ The legislation also would need to say that if no record of a mining claim is issued, then the rights that might have arisen under the staking of the claim do not come into existence.

These are minor discretionary powers. They go no further than specific and confined powers for the department, and are subordinate to the general free entry rights to enter public lands, to locate a claim, and go to lease. The foundations of the free entry system remain intact. If one were to go further, and give more discretionary authority to the government agency, then at some point the legislation could no longer be described as free entry but would be an administrative title system, considered separately below.

3. ADMINISTRATIVE TITLE

Mineral dispositions can be made under a system of administrative title which is conceptually very simple. The legislation provides for exploration and mining tenures with specified rights, procedures under which one applies for them, and a power for the Minister, or some such official, to grant or refuse the application. The system can be elaborated by specific rules for particular circumstances, such as a right to go to lease, and by stating criteria which the decision-maker may, or must, take into account.

²⁸ Precedent may be found in Alberta's Mineral Rights Compensation Regulation, Alta. Reg. 161/78, under the Mines and Minerals Act. It provides that where the minister cancels a mineral disposition like an exploration licence or a lease, the compensation payable to its holder by the Crown shall consist of the cash bonus bid, the fees and rentals, an allowance for money fairly and reasonably expended in the exploration for and development of minerals in the location; and an allowance for simple interest on those amounts. Nothing is paid for the possible value of the minerals or for loss of opportunity. The Regulation also permits the minister to give the holder of an existing disposition a notice that he or she believes that further exploration or development is not in the public interest. No expenditures after that date, or some later date specified in the notice, qualify for compensation.

There may be a power to impose different conditions on different dispositions as the circumstances suggest.

An administrative title system is characterized above all by administrative discretion. A mineral explorationist or developer depends upon the discretionary authority of the Minister or other decision-maker. That person can lawfully choose either to grant or to refuse each application as it comes in. Applicants can usually build up an understanding of the agency's practices, and develop a sense of what applications are likely to be accepted. However the chief difference between an administrative title system and the free entry system is that the Minister may say no.

In the light of this broad power to deny mineral dispositions, an administrative title system could function effectively without a power to withdraw sensitive lands from mineral activity by order in council. The same result can be obtained by denying all applications for those lands. More flexibly, applications could be granted subject to conditions designed to protect the particular non-mineral values in question, or to prevent the particular harm that is apprehended. There would therefore be less need to resort to the usual all-or-nothing procedure of a complete withdrawal of land. On the other hand, there may well be circumstances where it is better to provide for withdrawal powers to co-exist with the ministerial discretion to grant or refuse a disposition. In cases where there is no intention whatever of permitting mineral activity, or of permitting it only on fixed terms, a clear and promulgated rule to that effect is preferable to the opacity of a discretion, even if it is well known that applications will be denied for the sensitive area.

The non-free-entry provinces, Alberta, Nova Scotia and Prince Edward Island, use an administrative title system.²⁹ The Minister has a simple discretion to accept or decline an application for the permit or licence necessary to commence mineral exploration. In Alberta, section 10 of the Regulations simply states that "The Minister may grant a permit to an applicant" if he or she receives from the applicant an application in due form and the fee.³⁰ The Regulations go on to provide that there is no statutory right to go to lease in order to commence production; section 17 states that "The Minister may issue a lease ..." to a permit holder or other applicant. It may well be that the invariable practice of the department is to recognize that the holder of an exploration permit has a legitimate claim to a lease, but it would not be inherently unlawful for the department to change its practice.³¹

The different states and territories of Australia provide good examples of administrative title to minerals. Writing in 1988 Crommelin said that mining law in Australia (as in Canada) began under the free entry system, a system of possessory title; but that the free miner system is in decline, and is giving way to

²⁹ *Canadian Law of Mining*, p. 158.

³⁰ Metallic and Industrial Minerals Regulation, Alta. Reg. 66/93.

³¹ Judicial review may lie for a breach of legitimate expectation by an unannounced change of longstanding official practice: *Council for Civil Service Unions v Minister for Civil Service* [1985] A.C. 374.

administrative title.³² The trend has continued since then; Tasmania, the last state to retain free entry in its pure form, now employs administrative title. In 1996, Hunt could say of Australia as a whole that “all major exploration and mining titles stem not from any act of taking possession but from an administrative grant by government.”³³

The Western Australian form of administrative title, under the Mining Act 1978, provides that exploration titles (prospecting licences and exploration licences) are obtained under a process which requires application, public notice, rights for other persons to object, and a hearing before the Mining Warden.³⁴ Prospecting licence applications are decided by the Warden, subject to a right of appeal to the Minister. Exploration licences are decided by the Minister, upon receiving the recommendation of the Warden. Mining leases are also obtained under a process of application, notice, objection rights, hearing, recommendation to the Minister and decision by the Minister. However, the holder of a prospecting licence or exploration licence has a right to a lease.³⁵ There is a conflict of authority whether Wardens should hear objections based on Aboriginal or environmental matters,³⁶ but if there is any jurisdiction to do so it is only indistinct.

The Queensland Mineral Resources Act 1989 gives a picture of administrative title that is even clearer than Western Australia’s. For an exploration permit, an application is made in the prescribed form and supported by the prescribed information.³⁷ The Minister may grant the permit, subject to standard conditions on rentals, work program, control of environmental impact and rehabilitation, and also specific environmental conditions for the particular case. Similar rules apply to an application for a mineral development licence, a tenure which is designed to allow a company to hold title to a discovered mineral occurrence for some time without going into production.³⁸ A mining lease, which is necessary to go into production, is obtained by lodging an application accompanied by supporting information including an environmental management overview strategy for protecting the environment.³⁹ An environmental impact study may be required. The process includes public notice, objection rights, a hearing in the Warden’s Court, and a recommendation to the Minister for decision. The Warden must

³² M. Crommelin “Mining and Petroleum Titles” (1988) 62 A.L.J. 863.

³³ M. Hunt, “Principles of a Common Mining Code” [1996] AMPLA Yearbook 196 at 209.

³⁴ M. Hunt, *Halsbury’s Laws of Australia: Mining and Petroleum Law* (Sydney: Butterworths, 1997) (hereafter Hunt, 1997) paras 170-1410, 1490.

³⁵ Hunt, 1997, paras 170-1435, 1520, 2375.

³⁶ Hunt, 1997 para 170-3285; M. W. Hunt and M. A. Lewis, *Mining Law in Western Australia* (2d ed), Sydney, Federation Press, 1993; A. Gardner, “Resource Security and Integrated Management of Access to Natural Resources: The Case of Western Australia” in A. Gardner (ed.), *The Challenge of Resource Security*, Sydney, Federation Press, 1993, p. 133 at 152; E. Ross-Adjie, “The Role of the Warden” [1993] A.M.P.L.A. Yearbook 381.

³⁷ Hunt, 1997, paras 170-880, 890, 905.

³⁸ Hunt, 1997, paras 170-955, 965, 975. The mineral development licence and its equivalent in other states is therefore similar to the “significant discovery licence” granted under the Canadian Petroleum Resources Act.

³⁹ Hunt, 1997, paras 170-2010, 2030 to 2065.

take into account a number of specific criteria in deciding whether to recommend grant of the lease, including the financial and technical capabilities of the applicant, whether the proposed operations represent sound land use management, any adverse environmental effect, any prejudice to the public interest, and whether any good reason for refusal has been shown.⁴⁰

Likewise in the Northern Territory, under the Mining Act 1980, an application for an exploration licence is decided by the Minister,⁴¹ although he or she is obliged to grant an application for an exploration retention licence by the holder of an exploration licence who complies with the requirements of the Act.⁴² In turn the holder of an exploration retention licence may apply for a mineral lease. He or she must not be refused the lease without the approval of the Administrator of the Territory (equivalent to the Lieutenant-Governor of a province in Canada), and is entitled to compensation.⁴³ Subject to this limitation, mineral leases are granted by the Minister, subject to standard and specific conditions.

New South Wales makes a strong connection between the mineral title law and the land use and environmental law. A mineral explorationist can acquire an exploration licence under the Mining Act 1992 without planning permission; nothing under the Environmental Planning and Assessment Act 1979 operates to prevent the holder of an exploration licence from carrying out prospecting: section 381.⁴⁴ However the Minister, in deciding to grant one, must take into account the need to conserve and protect flora, fauna, fish, fisheries and scenic attractions and the features of Aboriginal, architectural, archaeological, historic or geological interest, in or on the land over which the authority or claim is sought: section 237. The Minister may require such studies (including environmental impact statements) to be carried out as he or she considers necessary to enable such a decision to be made.

If a mining company in New South Wales wishes to go further and acquire an assessment lease (which allows land to be held without development), notice of intention to make a grant of one must be given to a number of specified government departments and to the local municipality, which have the right to object: Part 1, Schedule 1. In order to grant a mining lease, the Minister must likewise give notice of his or her intention to do so to government departments and the local municipality, but also to the public and to landowners: Part 2, Schedule 1. The Mining Act gives those persons a right to object to the application, unless there is a right under the Environmental Planning and Assessment Act 1979 to make submissions in relation to the granting of a development consent under that Act: Mining Act Part 2 Schedule 1, clause 28. This avoids dual inquiries. Almost inevitably a development consent is necessary.

⁴⁰ Hunt, 1997, paras 170-2055.

⁴¹ Hunt, 1997, paras 170-640.

⁴² Hunt, 1997, paras 170-690.

⁴³ Hunt, 1997, paras 170-700.

⁴⁴ See D. S. White, "Development Consents and Mining in New South Wales" [1995] Australian Mining and Petroleum Law Association Yearbook 11, with commentaries by R. A. John, p. 37 and G. Kibble, p. 53.

The Mining Act specifically prevents the Minister from granting a mining lease unless a development consent under the Environmental Planning and Assessment Act 1979 is in force: section 65(2). For mines, the Minister for Planning has displaced local municipalities as the consent authority for development consent applications. The process requires an applicant to prepare an environmental impact statement is required. A public inquiry is then generally required. The inquiry commissioner reports to the Minister, who must consider the report but is not bound by it. When approved, the development consent covers all aspects of the proposed mine in detail. The consent allows the mining lease to be issued under the Mining Act.

4. MINERAL LEASING

Under a mineral leasing system, an explorationist applies for an exploration disposition for lands described by map description. Commonly the responsible department or agency has a degree of discretionary power to decide these applications. One decision is whether to post the requested lands, that is, whether to put the lands applied for into the leasing process. The department can then form a judgment as to the suitability of the lands for mineral leasing. Another decision in competitive leasing is which bid to accept. In some leasing systems, the department has some flexibility in deciding how the posting procedure and the bidding procedure will work. (Different procedures are discussed shortly.) Ordinarily, however, leasing legislation (or at least the way that it is administered) is relatively routine and predictable, and participants have an expectation that, all other things being equal, the department will post the land that they are interested in, and that it will award the lease to the highest bidder. The form of lease, and its terms and conditions as to matters that have not been the subject of bidding, will be standardized. Leasing therefore differs from administrative title in being less completely dominated by the exercise of discretion.

While the discretionary power to issue the disposition is the core of a leasing system, other elements are likely to be present:

- Rights of entry for reconnaissance purposes, e.g. geophysical survey.
- Posting procedures, by which an explorationist requests particular lands to be posted publicly as a invitation for bids or tenders for the land to be submitted by a stated date. Alternatively, priority among applicants may simply be by time of application.
- Competitive bidding on the basis of applicants' offers of a cash bonus or other criteria. There may be one sole criterion by which bids are judged, or there may be multiple criteria.
- An open discretion or a highly structured one where the agency's power is circumscribed and controlled by the legislation.

- Entitlement of a successful applicant for an exploration disposition to receive a further disposition in order to go into production. Alternatively the agency exercises a further discretion to grant a production lease to the holder of an exploration disposition who wishes to go into production.

As indicated above, there are potentially two main decisions to be made by the agency in a leasing system. The first is whether any disposition of minerals should be made for the place in question. Environmental or land use concerns may need to be balanced against mineral exploration. If a disposition can be made, then the second decision is to whom it should be made. This choice may be made through non-competitive leasing, where a lease is granted to the first qualified applicant, i.e. priority by time, or through competitive bidding.⁴⁵ Competitive bidding can take a number of different forms. Cash bonus bidding is the best known, but also there is royalty bidding, bonus bidding with substantial fixed royalty, profit-share bidding, and work commitment bidding. Variations and different combinations of them are also possible.

An elaborate example of leasing legislation is the Mineral Leasing Act 1920,⁴⁶ under which are obtained rights to federal coal resources in the United States. (Before then the coal had been disposed of under a system of free entry and sale.) The main procedure established under the 1920 Act was for public sale by competitive bidding; competitive leases were awarded in areas containing known quantities of coal deposits. Another procedure existed for unclaimed and undeveloped areas with no known coal deposits; prospecting permits could be issued with a right to obtain a preference right lease upon discovery of commercial quantities of coal. The Federal Coal Leasing Amendments Act of 1976⁴⁷ addressed serious problems that had developed under the 1920 Act. It reduced speculation by reducing the term of leases to 10 years unless in commercial production, and by imposing a national maximum of 100,000 acres that could be controlled by any one corporation. In order to improve financial returns to the public, the Act repealed the preference right leasing system, and ordained that bids under the competitive leasing system could not be accepted unless they represented the fair market value as determined by the Secretary for the Interior. In order to improve environmental protection, it prohibited coal leasing until an area is included in a comprehensive land use plan, and prior to leasing a public hearing must be held in the area to consider the effects of issuing leases on the environment, community and local economy. The Act of 1976 was followed by an regulatory statute aimed at environmental protection, the Surface Mining Control and Reclamation Act of 1977.⁴⁸ Because of

⁴⁵ S. L. McDonald, *The Leasing of Federal Lands for Fossil Fuels Production* (Washington D.C.: Resources for the Future, 1979) chaps. 5 & 6.

⁴⁶ 1920 c. 85, 41 Stat. 437, codified as amended in 30 U.S.C. §§181-287.

⁴⁷ Pub.L. No. 94-377, 90 Stat. 1013, codified in scattered sections of 30 U.S.C. §§181-352.

⁴⁸ Pub.L. No. 95-87, 91 Stat.445, codified in 30 U.S.C. §§1201-1328.

falling demand for coal and the stiffer environmental regime there has been little demand for coal leases except to expand the resource base at existing mines.⁴⁹

For more elaborate and more modern examples of leasing in Canada, one must turn to oil and gas legislation. Under the federal Canadian Petroleum Resources Act⁵⁰ there are three main tenures available: exploration licence, significant discovery licence, and production licence. An exploration licence is obtained after a public bidding process. Any person may make a request to the Minister for a posting or call for bids. The Minister is obliged to consider such requests in selecting frontier lands to be specified in a call for bids (section 14) but is not obliged to accede to them, and may not wish to put those lands up for bidding. When the Minister makes a posting or call for bids, he or she must specify the interests available, the lands concerned, and, noticeably, the “sole criterion” that the Minister will apply in assessing bids submitted in response to the call.⁵¹ The most important criterion to date has been the proposed work program or commitment that the explorer proposes to follow.⁵² The call must be open for a minimum of 120 days before closing: section 14(4). In order to be selected, a bid must satisfy the terms and conditions of the call, and be submitted as the call requires: section 15. A bid can only be selected on the basis of the criterion specified in the call: section 15. However, the Minister is not required to issue any interest as a result of a call for bids: section 16(1). For subsequent dispositions, the Act provides for a declaration of significant discovery, the issue of a significant discovery licence in order to hold the land for a longer period than under an exploration licence, and a declaration of commercial discovery. After the latter declaration is made, the Minister “shall issue” a production licence in respect of any commercial discovery area that is subject to an exploration licence or significant discovery licence: section 38.

Oil and gas dispositions under the Alberta Mines and Minerals Act are similarly available under a leasing system, although the Act and the Petroleum and Natural Gas Regulations⁵³ are less exact in their statement of the Minister’s discretionary powers. The tenure system has two stages, an initial exploration licence, and a more secure lease for production. Licences are disposed of at a sale by public tender.⁵⁴ The procedure is described as follows:⁵⁵

⁴⁹ H. P. Quinn, “Lessons from the Coal Law: The Future of Natural Resource Development” (1995) 41 RMMLI 2-1 at 2-18.

⁵⁰ S.C. 1986 c. 45.

⁵¹ Section 14(3). The previous legislation had permitted the minister to take into account any factors he or she considered appropriate in the public interest, and caused resentment within the industry for its bureaucratic character: A. R. Lucas and C. D. Hunt, *Oil and Gas Law in Canada* (Calgary: Carswell, 1990), p. 47.

⁵² Bennett Jones Verchere and N. D. Bankes (eds) *Canadian Oil and Gas (2nd ed)* (Toronto: Butterworths, 1993) Vol. 1, 3.174.

⁵³ Alta. Reg. 188/85.

⁵⁴ Bennett Jones Verchere and N. D. Bankes (eds) *Canadian Oil and Gas (2nd ed)* (Toronto: Butterworths, 1993) Vol. 1, 3.185.

⁵⁵ A. R. Lucas and C. D. Hunt, *Oil and Gas Law in Canada* (Calgary: Carswell, 1990), p. 14.

Persons who wish to acquire rights may request that the Department of Energy and Natural Resources advertise specific rights for sale. This is described as a posting request. Priority is given to postings where the requester is drilling a well to evaluate the posted parcel; otherwise posting is in the order that requests are received. There is normally a four-week period for accepting posting requests, followed by seven weeks of internal review regarding environmental and other land use concerns including possible industry consultation. An eight-week notice of the sale date is then published. Advance bookings for posting rights will be accepted where a requester wishes to acquire an interest timed to a well deeper than 3,000 metres that will evaluate the rights requested. Advanced bookings are initially advertised by a Notice of Pending Public Offering, and then republished eight weeks before the sale date. Interested parties may submit sealed tenders before the closing date that include cash, bank draft or certified cheque to cover the specified bonus, fee and rental. ...

Provided that the licensee drills a "lease-earning" well which "in the opinion of the Minister has evaluated petroleum or natural gas the rights to which are granted by the licence", there is a right to go to lease.

The discretionary procedure gives the government the ability to pursue different policy objectives in the course of issuing resource dispositions. First, it enables the government to consider the land use and environmental consequences of the grant of the licence, and (at least in theory) to decline to post the land for bids if it sees fit, or to post it on special conditions. Second, it enables the government to provide different degrees of encouragement for exploration in different parts of the province. (Both the term of the licence and its maximum spatial extent are determined by the region; more generous terms are available in the northern and foothills regions.⁵⁶) Third, it enables the government to extract economic rent by granting exploration rights to the highest bidder, that is to the company prepared to pay the highest cash bonus in its tender.

The essence of a leasing system is that the issue or grant of a mineral disposition depends upon the discretionary exercise of a power of decision by the government agency that is responsible for mineral resources. Just as with discretionary powers of any kind, the legislation can say nothing about the criteria or principles to be taken into account in making the decision, which leaves it largely up to the decision-maker to decide what matters to consider, or it can enunciate the criteria or principles in detail, which confines and restricts the exercise of the discretion, in order that it more closely conforms to the intentions of the legislature.

⁵⁶ *Canadian Oil and Gas*, 3.185.

There is a point of view that while leasing is appropriate to some minerals, such as oil and gas or coal, it is not appropriate to others, such as gold, other metals, and hardrock minerals generally. Leshy states the argument:⁵⁷

Minerals now generally subject to federal leasing (such as coal, oil, and gas) tend to occur in large deposits, and geological indicators may be used with some assurance to identify areas where they have a high probability of occurrence. This is perhaps less possible with hardrock deposits, which tend to be more localized and which occur in geological discontinuities and other formations less susceptible of confident geological inference. Although the rewards of a discovery are potentially great, the odds are very long. Therefore, it is argued that the incentives the Mining Law [a free entry system] offers to the prospector are superior to those offered by a leasing system.

He proceeds to suggest weaknesses in the argument; incentives can easily be built into a leasing system, and it is not clear, given modern advances in the understanding of geological processes, that geological inference is much more difficult to apply in hardrock mining. More work may be needed to clarify this question, and to do so with special regard to northern Canada. For example, target minerals are more diverse in hardrock mining than in oil or gas or coal. There are also differences between the industries in terms of the length of time it takes to know for sure whether producible quantities of the mineral exist. In hardrock mineral exploration, the need to secure ground by locating claims first arises at a point when it may still be too early to bid competitively for the ground. It may not be until later that a company is willing to bid for the land in hard cash, a work program, etc. The expense of completing production facilities is another difference. These differences were factors in debate in the United States in the 1970s over a proposal to move from free entry to mineral leasing for hardrock minerals.⁵⁸

5. MINERAL CONCESSIONS

Another method for the disposal of mineral interests in public lands is a separate concession agreement negotiated for each proposal. The agreement is fashioned to meet the needs of the individual case. There are two possible forms of such a concession agreement. The first is one that is negotiated under statutory authority and takes effect once it is signed. The second is an agreement that stands outside ordinary the statutory regime, and takes full effect when it is ratified by a special Act of the legislature. The special Act confirms that the agreement was validly made by the Minister or the government, and it enacts that the terms of the agreement shall apply and have the force of law even where they conflict with other legislation or common law. The combination of a contract between the state and the

⁵⁷ J. D. Leshy, *The Mining Law: A Study in Perpetual Motion* (Washington, D.C.: Resources for the Future, 1987), (hereafter Leshy) p. 333-34.

⁵⁸ Robert H. Nelson, "The Public Lands" in Paul R. Portney (ed), *Current Issues in Natural Resource Policy*, Washington D.C., Resources for the Future, 1982, p. 37.

developer and its ratification by statute may give the developer greater security of tenure than the general law. The agreement may contain an arbitration clause.

A concession agreement may cover a wide range of subjects in addition to the ordinary disposition of mineral exploration or production rights. It may, for example, provide for local content, infrastructure (town development, roads and railways and social services), and related developments like power supply, smelters and ports. If the concession agreement is ratified by the legislature, it can override the ordinary legislation that governs matters such as taxation, royalties, land access, water rights, and environmental management, and replace the general law with a set of special rules agreed to between the government and the development company.

The reasons for using concession agreements ratified by the legislature are described by Crommelin:⁵⁹

The principal advantage of the State Agreement is that it allows the parties to create a unique legal regime for each resource project. Deficiencies in the ordinary law of the State or Territory may be overcome, and special requirements of the parties in relation to the project may be met. In addition, the State Agreement provides a means of co-ordination of the numerous regulatory controls otherwise applicable to major projects. The State Agreement allows the establishment of an integrated regime for approval, management and monitoring of all stages of the project, under the supervision of a specified Minister of the State or Territory.

Concession agreements are flexible in procedure. Where they are not the kind that will be subsequently ratified, they are negotiated under provisions in the mining legislation that may simply authorize the Minister to enter into negotiations and conclude an agreement on such terms as he or she thinks fit. Where they are to be subsequently ratified, the negotiations need not be restricted by any procedural requirements at all in the existing legislation. Particularly in the case of ratified concession agreements, there need be no firm rule of to say when the government will agree to proceed by negotiating a concession agreement for a project, and when it will not see fit to do so and will simply apply the ordinary law.

Concession agreements are also flexible in content. An agreement confers a package of rights that is worked out in negotiation. The package is not a fixed and standardized set of rights prescribed by the statute. The lands covered, the term, rent, royalty, and work obligations are all determined through negotiation. When an agreement receives legislative ratification under a special Act, it attains a degree of flexibility that can take it completely outside the ordinary law of mineral title, land law, public land law,

⁵⁹ M. Crommelin, "State Agreements: Australian Trends and Experience" [1996] Australian Mining and Petroleum Law Association Yearbook 328 at 330, also published as "Development Alternatives: The Feasibility of the Single Window" in M. M. Ross and J. O. Saunders (eds), *Disposition of Natural Resources: Options and Issues for Northern Lands* (Calgary: Canadian Institute of Resources Law, 1997) p. 114.

aboriginal title, environmental protection, and taxation. The only possible legal limitation on the content of a ratified agreement would be constitutional law that restricts the capacity of the legislature.

This flexibility of procedure and of content distinguishes a concession system from an administrative title system or a leasing system. In those systems, the procedures to be followed to obtain a disposition of mineral title are laid down in legislation. The procedures are sometimes very detailed, especially in the case of leasing, confining both the applicant and the department in the manner in which they can proceed. The legislation is sometimes specific about the criteria or considerations that the department must apply to determine whether to issue the disposition. Under both administrative title and leasing systems, the legislation is also usually quite specific about the main elements of the disposition that may be issued to a successful applicant; term, rent, royalties, etc., even though particular terms and conditions may be attached. In contrast, therefore, concession agreements display the highest degree of discretion possible, both for the state and for the developer. If the agreement is subsequently ratified, it is scarcely a case of a statutory discretion at all; it has more of the character of the discretion that a person holds in deciding how to dispose of his or her private property.

In Canada, long-term concession agreements were once employed in Newfoundland.⁶⁰ They resulted in few benefits for the province. Elsewhere, dozens of concession agreements, or “state agreements” or “ratified agreements” have been used for large mineral projects in Australia, although numbers of mines operate under the general law.⁶¹ State agreements are generally used for the development phase of mineral activity. The earlier stages of reconnaissance and exploration proceed under the general mining legislation. In the state of Victoria, and also in Papua New Guinea, improvements are being made to the general mining legislation in order to avoid the need to negotiate a formal mining agreement for medium-sized mines.⁶² In developing countries, concession agreements and other contractual instruments have often been used for mineral and oil and gas activity. Negotiated agreements have been required where governments have had limited experience and limited background from which to establish standardized arrangements, and where companies have felt more secure under the law of contract, which insulates the conditions agreed upon from subsequent legislation and which enables a foreign investor to make a sanctity of contract argument if necessary in an international arbitration tribunal.⁶³

⁶⁰ *Canadian Law of Mining*, pp. 72, 145.

⁶¹ M. W. Hunt, “Innovations in Mineral Licensing” in *Energy and Resources Law '92* (London: Graham and Trotman for International Bar Association, Section of Energy and Natural Resources Law, 1992) p. 422 at 432. In Western Australia, 73% of the total value of mineral production is under state agreements: C. Barnett, “State Agreements” [1996] AMPLA 314. Also see L. Warnick, “State Agreements” (1988) 62 A.L.J. 878; Hunt, 1997 para 170-75. There is considerable Australian writing on these agreements.

⁶² M. W. Hunt, “Innovations in Mineral Licensing” in *Energy and Resources Law '92* (London: Graham and Trotman for International Bar Association, Section of Energy and Natural Resources Law, 1992) p. 422 at 432.

⁶³ T. W. Waelde, “Innovations in Petroleum and Mineral Licensing?” in *Energy and Resources Law '92* (London: Graham and Trotman for International Bar Association, Section of Energy and Natural Resources Law, 1992) p.393 at 406.

In the Canadian north, the Nunavut Tunngavik Incorporation, which is responsible for the management of Inuit-owned lands, has developed an elaborate system for mineral resource dispositions that includes an Inuit Mineral Concession Agreement.⁶⁴ The holder of an Inuit Exploration Licence may apply to the NTI to negotiate a Concession Agreement, which grants the exclusive right to explore for minerals in the concession area. If exploration is successful, the concession-holder is entitled to a production lease. While the Concession Agreement is finalized by negotiation, it is based on a detailed model form, and the negotiation procedure is controlled by the *Rules and Procedures for the Management of Inuit Owned Lands*.⁶⁵ The Concession Agreement is not ratified by legislation. The Inuvialuit of the western Arctic have also made use of the concession agreement model.

⁶⁴ R. A. Snow, "Resource Dispositions on Settlement Land in Yukon and Northwest Territories" in M. M. Ross and J. O. Saunders (eds), *Disposition of Natural Resources: Options and Issues for Northern Lands* (Calgary: Canadian Institute of Resources Law, 1997) p. 68.

⁶⁵ Iqaluit: Nunavut Tunngavik Inc., October 1996, unpublished. Also see the more general *Mining Policy*, Iqaluit: Nunavut Tunngavik Inc., December 1997, unpublished.

PART III: EVALUATION

The choice of criteria with which we evaluate the different systems for disposing of mineral title depends upon aspects of the general milieu of public policy for resource management and economic activity. One aspect is the relationship between the state and the private sector. The sustainable development paradigm calls on us to promote development that meets the needs of the present without compromising the ability of future generations to meet their own needs.⁶⁶ It must be implemented in a context where the stimulus of market forces promotes mineral development, and needs government action to constrain activity that would compromise the needs of future generations. In other words, the protection of ecosystems requires action by the state to modify the behaviour of the market. We look to the state for action to protect the non-market values (environmental, social) that are valued by society but not by the market economy. Often it acts through regulatory legislation, which presumes that the activity is good, and is not to be prohibited, but can have bad effects unless controls are put in place.⁶⁷ The consequence is that much public action is controlling and restrictive in character. The private sector sometimes criticizes this, suggesting that the government should focus more on promoting economic activity and less on hampering it. However, regulation is a necessary function of the legislature and the government.

A second general aspect is that most mineral resources and lands in the Northwest Territories are held by the Crown on behalf of the public. They are subject to unalienated aboriginal title except where it has been extinguished. The only foreseeable departure from this pattern of Crown ownership is for the settlement of aboriginal land claims. The Crown as owner is generally expected to be a good steward of those lands, even though it is not entirely in the same position as a private owner. It is expected to take care of them in the long term, but to permit them to be used to the public advantage, and to obtain a reasonable return from them where possible.

Against this background, it is possible to put forward some criteria in order to judge the strengths and weaknesses of different systems for granting dispositions of minerals.

1. SECURITY OF TITLE

There is likely to be general agreement that legislation for the disposition of Crown mineral rights should function effectively to carry out its basic purpose of making those dispositions. There should be few reasons for doubt about the legal status of a mineral title that has been issued; title should be secure. The allocation process should work effectively so that the dispositions that result from it are reliable and free from subsequent legal uncertainty. Transaction costs are thereby reduced.

⁶⁶ World Commission on Environment and Development, *Our Common Future* (Oxford: University Press, 1987) p. 8.

A related concern is appropriateness of the mineral title legislation to the context in which it operates. The mineral dispositions should suit the natural resources in question, and should suit the methods used to explore and develop them. (For example the size and duration of a mineral disposition should accommodate the likely exploration techniques.) They should not depend on unrealistic expectations of the knowledge that either the Crown or the resource company can have about the nature and value of the mineral resource on a particular site at early stages of exploration.

The Present System: Free Entry

There is a strong argument that ground staking of mining claims is specially suitable for the exploration of mineral resources. Exploration happens on the land, and a land-based system of title may be the best suited to it. There are advantages of speed, and of certainty that the claim boundaries correlate properly with the physical and geological features on the ground. An explorationist who encounters promising indications in the course of field work can stake and acquire title immediately. Claims can be located and recorded quickly to secure land for a short time to see if further work on them is justified. Few people will think it wrong to give an edge to the person who is working on the ground over the person who wishes to obtain title without leaving the office.

Ground staking as a means of mineral allocation took shape in the nineteenth century, a time when mineral exploration was entirely a matter of field work. There were no geological survey reports or records of filed assessment work for the initial research, there were no airborne surveys, and there were few methods for finding deposits that did not outcrop on the surface. Mapping was rudimentary and communications and transport between the field and a recorder's office was slow. Marking out the ground in a particular way made sense as a means of acquiring title to minerals.

The ground staking system has changed to keep up with changing exploration techniques. For example, the requirement of a discovery of valuable mineral in place was dropped,⁶⁷ reflecting the need for an explorationist to secure ground for reconnaissance and exploration before being able to say that a discovery had been made. Likewise, larger claims and the permit to prospect made the acquisition of title more appropriate to modern exploration techniques such as airborne geophysical surveys. Whether these changes have been sufficient to recognize the extent of the changes that have occurred over the

⁶⁷ *R v Wholesale Travel Group Inc* [1991] 3 S.C.R. 154 at 219 per Cory J.; A. Ogus, *Regulation: Legal Form and Economic Theory* (Oxford: Clarendon, 1994).

⁶⁸ Quartz Mining Regulations, 25 May 1917, P.C. 1429, Canada Gazette 30 June 1917, Supp. An unfortunate side-effect of this modernization is that it leaves the government without a ground on which to challenge a mining claim that has been staked for non-mineral purposes. While the subterfuge of staking a claim for say a holiday cottage might be met by the Territorial Land Use Regulations, there would be nothing in the Canada Mining Regulations (apart from lapsing for lack of representation work) to eliminate the claim. Again, the Mining Recorder has no discretion to refuse a suspect application.

years is an open question. Mapping, global positioning systems (GPS), and communications, for example, have improved greatly, and the planning of exploration programs involves a good deal of office work as well as field work.

The chief concern under this head is that the ground staking of mining claims provides a title that is less secure than can be obtained under other systems. While more often than not mining claims are located and held without any difficulty, an attack on the validity of the staking of a claim can cause legal uncertainties that can be difficult to put to rest. These uncertainties cause economic costs and dissipate economic rent.

Mining claims can be attacked by other persons for failure to stake in accordance with the Regulations. The grounds for an attack may be errors with the dimensions of the posts, with the information supplied on them, or with the blazing of lines between them. More typically, too much ground is claimed, or the ground is not open for staking, especially because of previous staking. The errors may be innocent ones; people mistake the distance between two posts, they get the compass declination wrong, they can't find the right sized post, they lose their pens, they find the weather hard to cope with, they run out of time before nightfall, they get lost. Other errors are from taking deliberate shortcuts. People set up their posts into the snow rather than the earth. They use the helicopter compass and altimeter to estimate the distance from another post. They use witness posts when it looks like too much of a hike to get to the ground itself. They lob their posts out the door of an aircraft in flight. In staking rushes in particular, people flout the Regulations and falsely certify on the application to record the claim that it was validly located in accordance with the Regulations.

Claim-jumping provides a measure of self-policing within the ground staking system. Another explorationist can quite legitimately overtake a claim, and dispute it in proceedings that aim to show that the first claim was too poorly staked to be valid, with the effect that the overtaking becomes the claim in force. Competition for good ground therefore acts as an incentive to stake properly. The Canada Mining Regulations of the Northwest Territories contain a "substantial compliance" clause that states the legal test to be followed in these staking disputes. Failure to comply with the staking requirements shall not invalidate a claim if the staker has "in good faith tried to comply with the requirements of those sections and his failure to do so is not of a character calculated or likely to mislead other persons locating claims": section 17(1). Most other jurisdictions in Canada have a similar test. The application of the test to particular staking efforts has been much litigated. There are hundreds of Canadian cases in the law reports, going back over a hundred years.⁶⁹

"Self-policing" has a pleasantly efficient sound to it, but the reality is messier. One situation is where explorationists encounter evidence of previous staking activity but cannot be sure whether old claims are

⁶⁹*Canadian Law of Mining*, Chap. 12.

still in existence. It will take them time and expense to find out, and until they know whether the ground is theirs they may be less enthusiastic in their efforts. A different situation, less common, is the staking rush, such as the one that occurred after the Lac de Gras diamond discovery was announced. Where companies are working fast to stake as much ground as possible, often knowing their staking procedures to be deficient, they can record enormous numbers of very flimsy mining claims. While this may cause unsophisticated purchasers to make unwise investments, the greater detriment may come from a blanketing of land by claims which a more serious explorationist may be obliged to challenge (or buy or option) in order to pursue work on the ground.

Perhaps the most serious kind of staking dispute is where an explorationist drilling on its claims makes an important find, and is overstaked by another company in order to seize control of the property. “Self-policing” is not a very edifying spectacle where the overstaker is trying to obtain the benefits of perhaps millions of dollars of risky exploration work, even if the first company had indeed been lax in its staking procedures. If the overstaker cannot be bought off, or if the first company refuses to try, then the dispute may proceed before both a specialist tribunal and the courts of general jurisdiction. (The Canada Mining Regulations provide for a claim dispute to be decided by the Supervising Mining Recorder, with the possibility of a review by the Minister: sections 28 and 84.) It is scarcely necessary to point out that litigation causes considerable expense, delay and uncertainty. The litigation that swirled around the Eskay Creek deposit in British Columbia in the late 1980s and early 1990s is an example.⁷⁰ During the three or four years that may be needed for proceedings in different courts, the development of the property will be compromised.

The uncertainty of title disputes is increased where the legislation is in an unsatisfactory condition. In the Mining Regulations, the substantial compliance section adds a rider requiring the applicant to have stated in his or her application to record, where he was aware of the requirements of those sections, in what respects he was unable to comply with the requirements and the reasons therefor: section 17(1). The result is that most claim holders will not be able to have the benefit of the substantial compliance section and will therefore be held to a standard of absolute compliance. The Regulations also provide poorly for the time restrictions for filing a notice of dispute of a claim: section 28(1).⁷¹

The Present System Plus: Modified Free Entry

⁷⁰ *Ecstall Mining Corp v Tagish Resources Ltd* (1993) 77 B.C.L.R. (2d) 156 (C.A.), *Eurus Resources Corp v British Columbia (Chief Gold Commissioner)* (16 Dec 1992) [1992] B.C.J. No. 2684 (Q.L.) (S.C.), and *Tagish Resources Ltd v Calpine Resources Inc* (1991) 56 B.C.L.R. (2d) 286 (S.C.) were some of the cases.

⁷¹ *Canadian Law of Mining*, pp. 270 & 353.

There can be little doubt that map selection, as a modification of the present system, gives greater security of title than ground staking. The root of title is the issue of the claim by the Recorder, subsequent to an application. It is relatively easy to determine whether there has been any vitiating defect in the procedure. (It would also be easy for the Regulations to provide additional security by declaring that a record of a claim issued by the Recorder shall be presumed to have been duly issued.) Deficiencies in procedure should be rare, in any event. In contrast, in ground staking, it is the staking on the ground that is the root of title to the claim,⁷² and the records in the Recorder's office are subordinate. Without a full survey and gathering of the facts, it is difficult to say whether a claim has been staked legally, and even with the best intentions a staker can readily make technical errors. With map selection, staking disputes would disappear altogether. (There might still be isolated disputes about compliance with the office procedures for the acquisition of claims, and still some about assessment work and whether a claim is in force for the current year.) Map selection therefore improves the security of title of explorationists and those who finance them.

There are questions about the appropriateness to context of map selection that need to be addressed, although they need not be unanswerable. One is that the person working on the ground and wanting to obtain title to land showing interesting features would face delay in getting to the Recorder's office, or getting a message to it, in order to apply to map select the land. Ground staking can be done on the spot. Technical advances notwithstanding, exploration still takes place on the ground. Another is the possibility that competition will be stifled by speculators who can tie up large amounts of land by map selection. Certainly this can happen, but can happen with ground staking as well. It can be avoided by various means, such as in Quebec where the number of claims that one person can select in a year is limited. Industry experience in Quebec and in Newfoundland, after the Voisey's Bay rush, could be investigated to good effect.

Administrative Title

Administrative title would give similar security of title to map selection. The appropriateness of the titles granted to the needs of mineral exploration would depend on the way that the system was designed. Term, areal extent, ease of procurement at different stages of the exploration and development process are examples of the type of factor that would be relevant to appropriateness.

Mineral Leasing

Mineral leasing would give similar security of title to map selection. Competitive leasing would reduce speculative blanketing of land.

⁷² *Canadian Law of Mining*, p. 256.

Mineral Concessions

A mineral concession agreement may be able to provide particularly secure title to a company if the agreement is ratified by the competent legislature. However, overall security of title may be reduced if the agreement overrides the interests of other persons, such as the holders of mineral or surface rights adjoining the main company's holdings. There need be no guarantee that explorationists will be permitted to go into production. Even the possibility or likelihood of separate legal treatment for some companies but not others may cast a shadow over security of tenure generally. Further, mineral concession agreements can be seen as the instrument of a particular political party in power, and a company that chooses to ally itself with one party through a concession agreement may find that its position is undermined when that party loses power, even if efforts have been made to entrench its agreement and ratifying legislation.

2. EFFICIENT PROCEDURES

Procedures for the acquisition and maintenance of mineral title should cost no more than necessary. Both the government department and the private sector title holders wish to minimize the transaction costs caused by waste, delay and complexity. The appropriateness of the regime to the context (the natural resources in question, and the methods used to explore and develop them) should be considered here as under security of title.

The Present System: Free Entry

Free entry and ground staking provide procedures for the acquisition of title that may often be swifter and simpler than other systems for a party operating in the field. (The drawbacks of ground staking that were discussed under the previous head related to the quality of the title once obtained, not the ease or difficulty of obtaining that title.) Ground staking may have fewer advantages for a company that is planning its exploration program in advance before heading into the field; permits to prospect would offer them a better procedure to secure ground under the present Regulations.

The main drawback of the existing free entry system is the cost of the staking work that must be carried out on the ground in order to acquire a claim. Whether the cost is significant is a question that deserves further inquiry. However it is probably not a major cost overall unless it requires additional travel to distant claims simply for the purpose of staking. From the department's point of view, ground staking may not impose significant costs in comparison to other systems. One area where it may find cost recovery more difficult is where the Supervising Mining Recorder becomes involved in resolving disputes.

The Present System Plus: Modified Free Entry

Map selection would be a simpler and less expensive means of acquiring mineral title. The Supervising Mining Recorder's work would also be simplified by reducing or eliminating the disputes workload. The possible disadvantage, noted earlier, is for a party in the field that wishes to secure rights to land that it is investigating. However modern communications make it easier and easier for a field party to contact an agent (or the Mining Recorder directly) and lodge applications for map selections.

A referral process when an application is made to record a claim would probably make the process of obtaining title longer, and would increase the workload of the departments concerned. (The comments made below under Administrative Title may be relevant, depending on the extent of the department's discretion in handling the application.) The referral process would also need to be designed carefully in order to be appropriate to the context of mineral title. Great numbers of claims are staked every year to hold land temporarily; often they lapse when the first representation work falls due.

Powers to impose terms and conditions, and more refined withdrawal powers and clearer relations with environmental law, would not reduce the efficiency of the present procedures.

Administrative Title

Under the criterion of efficiency of procedure, administrative title systems depend, more than the other systems here, on the way that they are established by legislation. Some can be very simple; that of Alberta, for example. Others can be very complex; that of New South Wales comes to mind. The particular advantage of a more elaborate procedure, however, is that in most cases it yields a greater result. If the procedure addresses the environmental acceptability of a project as well as the issue of bare mineral title, then a positive response to the application gives the operator a much higher level of certainty. In effect mineral title and environmental approvals would be obtained together. This could be the case at either the exploration or the development stage. There is a tradeoff between a quick procedure and a full clearance. One can see a connection here with the subject of integration of mineral title legislation and environmental legislation, which is considered further below.

Mineral Leasing

Most mineral leasing systems provide considerable certainty and predictability in their procedures for postings and tenders. However mineral leasing does not usually result in an immediate issue of title, so that the process for the acquisition of title would be longer than the present system. Again, a leasing system would need to be designed carefully to suit the context of mineral title.

Mineral Concessions

An unstructured and highly discretionary negotiating procedure presents serious problems of delay, uncertainty and expense. They are increased if the concession agreement must be ratified by the federal Parliament as well as the Minister and possibly the territorial legislature. Terms that go outside the Canada Mining Regulations and (say) the Fisheries Act, for environmental purposes, would entangle the project in the uncertainties of the federal government's legislative timetable and political agenda.

Mineral concession agreements are unlikely to be appropriate to the context of exploration for hardrock minerals, even if they are otherwise thought to be suitable for development and operation. The uncertainties of mineral exploration would make it impossible to foreshadow any specific development project.

3. PROPER RETURN TO THE CROWN

Different disposition systems offer different opportunities for the Crown as owner to obtain revenues from natural resources - to collect economic rents from mineral development. If available rents are not being collected, then the government should be prepared to explain the reasons for their distribution to the industry or other sectors of society.⁷³

The Present System: Free Entry

Under the Canada Mining Regulations, returns to the Crown (leaving aside fees and rentals) are obtained through the royalties payable on production. It is not necessary to discuss levels of royalty here; it is sufficient to note that the legal means are in place to collect economic rent.

The main question is whether the Regulations are missing other opportunities to collect economic rent. There are occasions, well before any mine goes into production, where lands appear to command a premium that may indicate the existence of economic rents. Staking rushes are occasionally sparked by a major new discovery, the re-opening of land after the lifting of a withdrawal, or by the release of new geological information. Smaller parcels of land attract attention where a promising claim lapses or is forfeited. Under the free entry system, the land is obtained by the first company to stake it. No extra payment is due to the Crown even though the title so obtained may be very valuable.

⁷³ M. Crommelin, "Government Management of Oil and Gas in Alberta" (1975) 13 Alta. L. Rev. 146 at 148.

The Present System Plus: Modified Free Entry

For the most part, the same evaluation would apply, because none of the suggested modifications would alter the free entry system in relation to returns to the Crown. A move from ground staking to map selection would reduce exploration costs, and so improve the ability of the industry to pay economic rents.

Administrative Title

Possibilities under this heading are better evaluated under Mineral Leasing.

Mineral Leasing

A mineral leasing system offers a new opportunity to raise revenue for the Crown as owner. Under the evaluation of the present system, it was suggested that economic rent may occasionally exist at the exploration stage, before lands come into production. Staking rushes and special competition for ground indicate that the land has special value. A cash bidding system could collect this economic rent by changing the rule of allocation of exploration title from priority by time of staking to one of priority by size of bid.

However such special value, and the willingness of companies to pay a premium to secure ground, may not be widespread. In the normal course of events, the hardrock mineral exploration process may be too uncertain to encourage companies to pay cash up front. Argument by analogy from the oil and gas industry may encounter differences in geological and industry context. (Extrapolation to adjacent land may be more possible there, because oil and gas tend to occur in horizontally-disposed deposits, and tend to be homogeneous in their composition and their means of exploitation, at least in comparison with hardrock mineral targets.) Again, however, some investigation of the question would be worthwhile before ruling leasing out.

Even if there are difficulties with a general system of mineral leasing, there may be specific cases where it can be introduced and experimented with. The difficulty of choosing when to post land for competitive bidding could be reduced by confining it to particular cases. One case that is likely to be suitable is where lands are re-opened after a period of closure or a forfeiture of a claim.⁷⁴ Another (referred to

⁷⁴ A limited experiment with cash bidding for particular hardrock mineral lands is seen in ss. 19-24 of the Recreation Area Regulation, B.C. Reg 62/89, empowering the Minister to make a Call for Proposals and requiring miners to make a cash bid which is a percentage (set by the Minister in the Call) of the value of the work program for the land for the first year.

earlier) is where map selection is introduced and competing claims are lodged simultaneously, or within a given period of time of each other.

Mineral Concessions

Mineral concessions offer a government the hope that its skill and expertise in bilateral bargaining will enable it to get a better financial return from a project than it would get under routine cash bidding or royalty rules. A government can also be attracted to the possibility of obtaining a better overall package, including benefits such as new infrastructure, regional development, etc. The private nature of concession agreement negotiation makes it difficult to determine whether the trade-offs actually result in a better result overall.

4. MINIMAL HARM TO LAND IN ACQUIRING TITLE

The process of acquiring and maintaining mineral title should involve no more environmental impact than necessary.

The Present System: Free Entry

Ground staking causes impacts that may usually be modest. However they are not controlled,⁷⁵ and from time to time they may be significant. Large amounts of air traffic caused by a staking rush, for example, may affect wildlife. Boundary lines must be marked so that they may be followed throughout their entire length, either by blazing trees and cutting underbrush, or in treeless areas by placing posts or by making mounds of earth or stone. Information on the significance of these impacts would be useful. Such impacts do not occur under any of the other disposition systems being considered here.

There is also the possibility that representation work (work requirements) necessary to keep a mining claim in good standing cause environmental degradation where it would otherwise not occur. However most companies are likely to ensure that work done to fulfil representation work obligations is also useful exploration work. They are assisted by section 37 which allows claims to be grouped for cross-crediting work, section 38(3) which allows work to be carried forward to future years, and section 44 which allows extensions to be granted. Again, information on the extent of the problem would be useful.

The Present System Plus: Modified Free Entry

⁷⁵ It was noted above that staking is excluded from the Territorial Land Use Regulations, C.R.C. 1978 c. 1524 s. 6.

Under map selection, there is no fixing of posts or marking of lines in order to acquire title. There would therefore be no direct environmental impact from the acquisition of title.

Administrative Title

The system does not depend on activity on the ground for mineral title to be issued.

Mineral Leasing

The system does not depend on activity on the ground for mineral title to be issued.

Mineral Concessions

The system does not depend on activity on the ground for mineral title to be issued.

5. APPROPRIATE DECISION-MAKING POWERS

Another broad proposition that is likely to obtain general agreement is that on the one hand mineral exploration and development should occur, but on the other there will be places where they cannot occur, or only under very specific conditions. At one extreme, it is hardly credible to say that all mining is unacceptable, or to say that it can only take place in some other jurisdiction. At the other extreme, it is hardly credible to say that mining activity is always acceptable where ever it is economic, regardless of the impact on non-mineral values.

The problem is to know when and where mining activity will be acceptable. The decision must be taken under conditions of uncertainty.⁷⁶

On the one hand is the uncertainty that surrounds undeveloped mineral resources. Before coming to grips with specific targets, an explorationist may find it difficult to guess what exploration techniques may be needed to explore and evaluate anything that is found. He or she will not find it easy to respond to a regulatory requirement to state what environmental impacts are likely to be caused by exploration. Once a particular property is under investigation, whether a mineral deposit exists there is merely the first of the many questions that must be asked. How big is the deposit, what is its concentration, how deep is it

⁷⁶ On uncertainty and information see A. Cox, "Land Access for Mineral Development in Australia" in R. G. Eggert (ed.) *Mining and the Environment: International Perspectives on Public Policy* (Washington, DC: Resources for the Future, 1994) p. 21.

located below non-mineralized rock? How can it be extracted, open pit or underground? How stable is the rock for mine construction purposes? What is the chemistry of the mineralization, and what metallurgical processes can be employed to separate or concentrate the valuable material from the rest? It is often said, and rightly so, that minerals are where you find them.

On the other hand is the uncertainty that surrounds other values, especially ecological ones. Ecosystems, endangered species, and critical habitat are where you find them too. Biological processes are complex. Also complex are social processes which may throw up questions of local employment, cultural aspiration or regional development in unforeseeable ways. Unforeseeability is even higher before mineral activity has actually got under way, because there will have been no particular reason to begin detailed studies at that particular place, and there will have been no information available about the character of the development that will occur. How can water quality specialists, for example, begin baseline studies before they know that an area is about to attract a staking rush, before they know what mineral will be targeted, before they know whether something like acid mine drainage will be an issue, and before anyone knows what sort and what size of mine will be constructed?

The first kind of uncertainty is reduced by the acquisition of geoscience information by companies responding to market incentives in the private sector. (Due credit should be given, of course, to the role of government geological surveys.) The second kind of uncertainty is reduced by the activities of government, in pursuit of its obligations to protect non-market values.

In spite of these uncertainties, on both sides of the ledger, decisions must be made about mineral dispositions, land use, and environmental protection. Sometimes we describe the task as one of striking the right balance between mineral values and non-mineral values. How do we expect these decisions to be made? In terms of sustainable development, we expect them to be taken in a way that will ensure that mineral development does not compromise the ability of future generations to meet their own needs. We have already noted that we look to the state to decide. The state safeguards non-market values such as the environment and the needs of future generations. In addition, in this case the Crown is owner of the lands and minerals concerned. Aspects of this criterion are therefore:

- Effective government powers to ensure that mineral dispositions are made in ways that do not compromise environmental values and other important social values.
- Power to act at the key decision points.
- Flexibility; are powers able to respond suitably to different situations?

In legal terms, government powers under legislation to decide whether to issue mineral dispositions are powers to make discretionary decisions. Not all such powers are the same. If the legislation does not confer a power in an appropriate fashion, then it may be less effective than it should be, it may impose

unnecessary costs on others, and it may tend towards injustice. Writing in the USA about moving from free entry to leasing, MacDonnell pointed out:⁷⁷

Discretion is useful because it allows for orderly change in administration to take place as changing conditions dictate rather than having procedures statutorily ossified. The evil, then, is not in administrative discretion itself but in discretion without adequate standards and guidelines.

Additional aspects of this criterion are therefore:

- Statements by the legislature of the purpose and principle that guide the use of the discretion. The main policy choices should be made by the legislature. Administrators should receive clear indications of the range of decisions that they can make.
- Statements in the legislation of the criteria, standards, or guidelines or matters that may and may not be taken into account in making the decision. Explicit criteria confine the discretion and make it less uncertain.
- Procedures that structure discretionary decision-making, making it more open and more uncertainty and the possibility of misuse of power.

The mineral industry is particularly concerned about uncertainty, and can legitimately ask how much of it can be whittled away. Uncertainty can hamper government agencies just as much. A ‘managerial’ approach to the implementation of policy leaves much to behind-the-scenes negotiations and trade-offs, but a ‘legal’ approach, displaying some of the characteristics that we have mentioned, ensures that policies are articulated, proclaimed and enforced in plain view.⁷⁸ Law can state how and why authority can be exercised, so as to improve transparency, clarity and consistency. reasoned. Persons affected may wish to have their views heard. Such procedures can reduce

The Present System: Free Entry

The leading feature of the free entry system is that government agencies do not have any discretionary power at all over the occurrence of mineral exploration, the location of claims, or the procurement of mining leases for production. Discretionary power over these matters does exist; but it is in the hands of the private sector explorationists and mining company who decide where to locate claims and apply for leases. This affects the work of Crown land administrators very significantly, in their efforts to accommodate different land uses such as forestry, new parks, recreation, outfitting, wilderness or habitat protection. It affects the third parties who have interests in Crown land use. The basic rule of free entry is that mining is a permitted land use, indeed a priority, notwithstanding any planning efforts of government agencies, because the mining legislation says so.

⁷⁷ L. J. MacDonnell, “Public Policy for Hard-Rock Minerals Access on Federal Lands: A Legal-Economic Analysis” (1976) 71 *Quarterly of the Colorado School of Mines* 37.

⁷⁸ A. R. Thompson, “Economic Aspects of the Public Interest: A Lawyer’s Perspective” in M. M. Ross and J. O. Saunders (eds), *Disposition of Natural Resources: Options and Issues for Northern Lands* (Calgary: Canadian Institute of Resources Law, 1997) p. 1.

There is no opportunity to impose conditions upon the grant of a mining claim to modify the manner in which it is used, for example to take special measures to protect wildlife values in the area where it is located, or to ensure compliance with land claims policies or training and employment policies.

There is no opportunity for the Crown land administrators to consider a project at the time of application for a mining lease. At that time, levels of uncertainty both about geology and about biology may have shrunk considerably, as attention focusses on the particular place and knowledge about it has grown. However, it is too late, under the existing Regulations, for that knowledge to be used in deciding whether the place is one for which a mineral production title should be granted.

The industry defends the free entry right to go to lease if a viable mine has been discovered without any intervening government discretion. The main reason is investment certainty. Investment in mineral exploration and development will dry up if investors come to believe that exploration successes may be seized by an unpredictable government. Exploration is risky enough without adding unnecessary sovereign risk.

Since free entry gives administrators so little say, let alone control, they are obliged to withdraw significant amounts of land from mineral entry. Free entry invites withdrawals. Withdrawal must be their main tool to confine or exclude mineral exploration or mineral development.⁷⁹ Withdrawal is not always an effective tool, because it must be used before the staking begins; afterwards, the only thing the government can do is expropriate the claims.

The power in section 11(1)(f) of the Canada Mining Regulations to withdraw lands from mineral entry is conferred in general language, saying nothing to indicate the purposes for which it may be exercised, and nothing as to the matters to be considered before deciding to exercise it. There are no procedures for consultation or for obtaining and evaluating the views of different parties and agencies. It is a heavy instrument, an all-or-nothing means of management, even though orders can be made on terms.

The withdrawal of lands is unpopular with the mineral industry, because it erodes the nation's exploration land base and the industry's ability to make new discoveries. The viability of the industry in Canada is said to be threatened. The industry argues that land should not be designated for parks or recreation areas, or withdrawn for land claims purposes, until there has been thorough assessment or exploration, and even then it should not necessarily be withdrawn from mining - it should not be locked up.

The Present System Plus: Modified Free Entry

Map selection in itself does not alter the present allocation of decision-making powers. If the Mining Recorder is obliged to issue a record of a claim where ever a proper application is made, it is still a free entry system. Map selection does not give administrators any greater ability to manage the use of Crown land for mineral purposes. All that changes are the mechanisms.

An improved land-use management system would improve the power to withdraw lands from mineral entry. It could improve agency powers to protect environmental values. At the same time it could improve the industry's position by redressing many of the deficiencies noted above as to purpose, criteria, procedure and conditions.

The proposals for the Recorder or some other official in the agency to have discretionary power in specified cases are, obviously, intended to improve the appropriateness of decision-making powers. They can be shaped so as to focus on particular situations where the government lacks power to take action, while making as little intrusion as possible on the free entry system. They can do so by having regard for the considerations that arose in discussing criteria for appropriate decision-making powers.

A modified system with an improved withdrawal power and improved powers to fix terms and conditions should be connected with land use planning procedures. Ideally, land use planning employs knowledge about land and resources to develop plans which embody long-term strategic policy choices. They represent the community's thinking about what uses, developments, and impacts are likely to be acceptable in different places. They provide a context or framework of policy within which a particular project or application can be judged when it comes forward. The withdrawal power and powers to impose terms and conditions would be exercised in a way that would give effect to the objectives, policies and stipulations of the plans, unless a conscious decision was made to depart from them. While there is little such land use planning under way in the Territories at the present, there will be more under the Nunavut Planning Commission and the institutions to be established under the Mackenzie Valley Resource Management Act.

Administrative Title

Generally speaking, an administrative title system will give the government very effective powers to grant or withhold mineral rights. It will also ensure that the government holds adequate powers to institute administrative procedures such as an inter-agency referral process.

However in respect of the control of discretionary power, an administrative title system could rate either very well or very badly, depending on how it is designed. Legislation which states simply that "the

⁷⁹ The same problem arises in the U.S.: Robert H. Nelson, "The Public Lands" in Paul R. Portney (ed), *Current Issues in Natural Resource Policy*, Washington D.C., Resources for the Future, 1982, p. 14 at 37.

Minister may issue a licence” must receive a poor evaluation because of its potential for opaque policy, unpredictability and capriciousness. Both industry and environmental values could be adversely affected.

(It should be added that there are cases, such as oil and gas in Alberta, where the legislation leaves the Minister’s discretion almost completely uncontrolled. However, the administration of the legislation and the exercise of the discretionary power have been stable and predictable for many years. The industry feels little anxiety about how it may be exercised in the future. This sense of reassurance is more a matter of political perception than legal rules.⁸⁰)

At the other extreme, where it is intended to secure stability and predictability by law, the legislation for an administrative discretion system must be rather more detailed in limiting discretions by explicit purpose, criteria, procedures and the like. There are models for such legislation in Australia, especially New South Wales and Queensland. Ministers and those who advise them there are assigned specific matters to take into account before making their decisions. It would be best to avoid the kind of doubts encountered in Western Australia about objections based on Aboriginal and environmental matters, preferably by clearly allowing them to be heard if they cannot be heard elsewhere. In all those states there is a public hearing in order to bring decision-making out into the open, allowing parties to know what case they face and to put their point of view directly into the administrative decision-making process.

One particular question for such a system is whether there should be a second stage of administrative decision-making for the holder of a claim who wishes to go to lease. As we noticed in discussing the free entry system under this head, the industry will argue strongly that having run the very considerable risks of exploration, the holder of claims should have a right to a mining lease in order to go into production. An opposite view might agree that a lease should normally be issued, but assert that a discretion should be reserved to consider issues that did not properly manifest themselves when the initial application for exploration rights was approved. Indeed, explorationists would face a high barrier if, every time they wanted claims or exploration rights, they had to satisfy decision-makers that mineral development and production would be acceptable on the site. If they are not to face the scrutiny every time they wish to carry out exploration which may have little environmental impact, then they may be obliged to face it later.

In Australia, the holder of an exploration tenure has a right to a mining lease in Western Australia but not in Queensland or New South Wales. An explorationist in the Northern Territory can be refused a mining lease only with the approval of the Administrator of the Territory and the payment of compensation. This is a good example of creativity in controlling discretionary powers in order to balance different interests.

Mineral Leasing

In evaluation under this criterion, a mineral leasing system is similar to an administrative title system in that it is capable of wide differences in the way that it is designed. It has the potential to give administrators considerable ability to refrain from posting lands where environmental or other values outweigh any possible mineral values. In most leasing systems, however, there is no formal procedure or criteria under which to make the decision to refrain from posting lands. The matter is very much one of administrative action or (more accurately) inaction, and decisions could be secretive and arbitrary. On the other hand, leasing generally implies a bidding process of some kind where the procedures are well established and relatively open. The criterion used to judge bids is also generally public information.

One noticeable difference between free entry and leasing is that under the former, the rule of priority of staking applies. (Under map selection it would be priority of application.) Under the latter, the rule is changed to priority by bid, by whatever criterion is established.

Mineral leasing has been put forward as a serious alternative to free entry in the United States. Leshy⁸¹ argues that leasing offers great adaptability and flexibility, as conditions change, so that policy can develop as needs dictate, rather than being fixed in the statutory preferences of the Mining Law of 1872, which is still in force. The decision whether to lease provides the opportunity to balance mineral development against non-mineral concerns at the threshold. The terms and conditions included in the lease provide an opportunity to tailor mineral development in such a way as to protect other resource values. It is therefore better than extensive use of the withdrawal power, which as in Canada generally mandates an all-or-nothing result, all-out development versus no activity at all. Withdrawal has other limitations; it requires an affirmative act, so that any inertia will weigh against non-mineral concerns, and it only operates prospectively, because “valid existing rights” are usually exempted. These limitations mean that leasing may actually make it possible to open up lands that now are withdrawn:⁸²

Although considerable authority to control the environmental effects of Mining Law activity is now in the hands of federal agencies, both the agencies and environmental protection advocates outside the government often lack confidence in that authority or in the effectiveness of agency regulations. The spectre of the government being helpless to provide adequate protection to other values and interests if withdrawals blanketing particular areas are revoked has not disappeared completely; the Mining Law is still perceived as quite a loose cannon on the federal land deck. By contrast, a leasing system, by making environmental controls more open and indisputable, might carry with it sufficient confidence to allow hardrock exploration and

⁸⁰ A. Thompson, “Legal Characteristics of Disposition Systems: An Overview” in N. Bankes and J.O. Saunders (eds) *Public Disposition of Natural Resources* (Calgary: Canadian Institute of Resources Law, 1983) p. 1.

⁸¹ Leshy, p. 327.

⁸² Leshy, p. 331-332.

development to proceed even in relatively sensitive areas. In this way the blunt withdrawal instrument, which closes off hardrock activity entirely (except on existing valid claims), could be used more sparingly. A leasing system might well make it easier to revoke existing withdrawals from the Mining Law, and thus open up more federal lands to hardrock mineral exploration and development.

In a discussion that is just as relevant to Canada as to the United States, Leshy disputes industry assumptions and fears that a leasing system will result in a lockup of mineral lands. Congress can incorporate pro-development safeguards in the leasing legislation, such as requiring the agency to write explicit standards for lease issuance, requiring decisions not to lease to be supported by “substantial” evidence, “a preponderance of” or “clear and convincing” evidence, or, in a rough and ready solution, to require the agency to make some specified minimum acreage available over a specified time frame. (This is precisely the kind of limitation of discretion that we have been considering throughout this discussion.) Leshy observes that the industry’s fear that a leasing system will lead to a lockup of mineral lands is rooted in scepticism about the ability of government to take a rounded, long-range view of society’s needs. However opinion polls indicate that the protection of the environment is a high public priority and has been for years. In a democracy this concern will be reflected in the choices of legislators and administrators. Moreover, leasing systems presently functioning in the USA and elsewhere show evidence of considerable mineral activity rather than any lockup.

Many of these observations apply to administrative title systems just as much as they do to mineral leasing.

Mineral Concessions

In this analysis, mineral concessions represent the ultimate in uncontrolled discretion, and suffer from all the failings that that implies. There is potential for unfairness and inconsistency even in the initial decision to select one company and not another for a concession approach. The negotiations are behind closed doors. Separate legislative ratification by its nature takes the exercise outside any possible statutory limitations as to the general societal objectives to be pursued, the procedure to be followed, the proper considerations to be taken into account, and the result. There are no limits to what the government can then put on the table, to the value it puts on different interests (environmental, proper royalty return, etc.), or to the way that those interests may be compromised. This stands in contrast to good administrative and quasi-judicial procedures, where the weighing of different interests and values must be done out in the open. For that matter, the ordinary legislative process is itself such a weighing of different values.

The opposite side of the coin is that a mineral concession system certainly does give governments powers to act effectively and flexibly. (Flexibility can be reduced, however, if a government by a

legislatively-ratified contract prevents itself from using regulatory powers to deal with circumstances that only arise at a later time.) The main concern is whether governments are prone to use the powers for short-term political advantage, with the risk of being co-opted for private purposes. It is constitutionally dangerous to use a special Act to exempt a project from the constraints, duties and balances contained in general legislation, and to remove one company (and, one must note, government decision-making in relation to that company) from the scrutiny that others undergo.

6. INTEGRATION OF LEGISLATION

The general body of legislation for any jurisdiction should be well integrated, even where it pursues different aspects of the public interest. In particular, what should be the relationship between the mining legislation and the legislation concerning land use, pollution, wildlife, parks, and land claim settlements? Integration does not require that these issues all be governed by one big Act, or even that they be the subject of integrated procedures. However it can mean:

- There should be clarity in the relationship between mineral title legislation and other legislation.
- Legislation should be consistent; in the relationship between one Act and another, there should be as few as possible contradictions, duplications, gaps, or false expectations.
- Environmental and land use decisions should not be controlled or restricted by the mineral title legislation.

In sustainable development terms, legislation should provide an integrated approach to planning and making decisions that takes into account the environmental and natural resource costs of different economic options and the economic costs of different environmental and natural resource options.⁸³

The Present System: Free Entry

The main difficulty that the free entry system presents for integration is the expectation that it raises that mineral activity will be permitted if one has complied with the mining legislation. Certainly, the mining legislation does not exempt mineral operations from the environmental and land use legislation; in fact, in some sections it expressly makes them subject to it.⁸⁴ Explorationists know that there will be restrictions under the Territorial Land Use Regulations on the way that they perform their field work; for water quality, camp site clean-up and the like. Mine developers know that the way that they develop their mine will be affected by the need to go through EIA and permitting processes as well. But it is sometimes assumed that restrictions will only affect the way that they proceed, and will not actually bring a project to a stop. This expectation is raised by each of the three elements of free entry; the right to

⁸³ Auditor General Act RSC c. A-17 s. 21.1.

⁸⁴ Canada Mining Regulations, s 11(1); s. 27(1); s. 73(2). These are all references to the Territorial Lands Act or regulations made under it.

enter Crown lands for mineral purposes, the right to acquire a claim through the self-initiated process of staking a claim, and the right to obtain a mining lease for production purposes.

The history is that mining legislation, in which these free entry rights were conferred, became more completely developed before environmental legislation. It has not been radically reformed, and has been able to maintain its separate identity. However the consequence is that it may be understood to be granting permissions or rights that in fact cannot be used without compliance with other legislation. In theory this should not be a problem. It is common to encounter situations where multiple permissions are required for some large undertaking, and everyone knows that permission to proceed on one front does not guarantee success on the others. On the face of it, then, it should be perfectly possible to continue to use land use and environmental legislation to constrain the adverse impacts of mining. In practice, it is not entirely that easy.

The first problem is that the free entry system probably lends strength to the view that environmental and land use controls can constrain but cannot prevent mineral development; that regulators cannot use their statutory powers in a way that would prevent the holder of a mineral disposition from enjoying the right to explore or to mine that it confers. To some extent, regulators acquiesce in expectations that they will not actually prevent mining. In one EARP report about “walking” a bulldozer 200 km to a group of claims in Yukon, the department reasoned that “access to mining claims cannot be denied.”⁸⁵ The same self-abnegation is found in the United States. Regulatory agencies believe, with little legal foundation, that they cannot interfere with the industry’s statutory right to mine. “[T]he mystique of the 1872 law and its perceived ‘right to mine’ cause Bureau of Land Management and Forest Service employees to head for the door when it becomes time to declare that the location of a mine prohibits mining or that an obstinate company must be shut down because it has failed to comply with agency directives.”⁸⁶

The second problem is that the uneasy relationship between the disposition of title to minerals under the free entry system and the regulation of mineral activity for environmental reasons raises the possibility of liability to pay compensation for expropriation through regulatory action. In *British Columbia v Tener*⁸⁷ a person held mineral claims under the mining legislation of British Columbia.⁸⁸ They were overlain by the gazettement of Wells Gray Provincial Park. The owner initially received permission to

⁸⁵ *Canadian Parks & Wilderness Society v Canada (Minister of Indian Affairs & Northern Development)* (1995) 19 CELR (NS) 271 (Fed TD).

⁸⁶ C. F. Wilkinson, *Crossing the Next Meridian: Land, Water, and the Future of the West* (Washington, D.C.: Island Press, 1992) p. 67. Also see D. Werth, “Where Regulation and Property Rights Collide: Reforming the Hardrock Act of 1872” (Symposium “A New Era for the Western Public Lands”), (1994) 65 U Colorado Law Rev. 427-458 at 438, 447. Leshy, in chapter 10, describes how agencies have gradually been given powers to regulate hardrock mineral activity for environmental purposes, but “in the departments of Agriculture and the Interior a significant vestige remains of the solicitude these agencies have historically displayed toward Mining Law activities.” (p. 223.)

⁸⁷ [1985] 1 S.C.R. 533 (B.C.). See Barton, *The Future of the Free Entry System*, p. 94.

⁸⁸ The claims were actually Crown-granted mineral claims, ie patented claims, but the point was not significant.

conduct mineral operations, but under gradually-tightening park legislation he was finally refused permission. He succeeded in an assertion that compensation was legally due to him even though the government had not acted under any statutory expropriation power. The Supreme Court of Canada held that he had been deprived of all real opportunity to explore or develop the claims by land use management legislation, and was therefore held legally entitled to compensation for expropriation.

The payment of compensation in a case on all fours with *Tener* seems quite fair. However by no means all cases of land use management or control are caught by it. The Supreme Court of Canada distinguished the facts of the case from zoning, “the broad legislative assignment of land use to land in the community” and from “regulation of specific activity on certain land, as for example, the prohibition of specified manufacturing processes.”⁸⁹ In contrast, in the facts of the case the government took value from *Tener* and added it to its park. There must be an acquisition of rights by the government, not merely a reduction or dissipation of rights in the hands of the plaintiff.⁹⁰

The risk is that the *Tener* case may frighten decision makers away from exercising legitimate statutory functions and duties, and refrain from legitimate regulatory activity even where action is necessary to protect environmental or other values, out of a nebulous apprehension of having to pay compensation to disgruntled claimholders. This forgets why society, working through the state, uses regulatory legislation in the first place. We use it to prevent people and corporations who are engaged in activities that are basically beneficial from proceeding with them in ways that would have a negative effect on the public good. Its whole purpose is to constrain people from doing what they would otherwise want to do.

The relationship between the mining legislation and the environmental legislation is central to the question of regulatory taking.⁹¹ Because of the promises made by the free entry system, mineral operators have high expectations of being able to proceed without regulatory obstruction. The tension between expectations and regulatory reality is heightened by the ease with which a mineral operator can acquire a property right through a system of self-initiated title, without requiring the least consent or approval from the government. Moreover, a mining claim (as well as a mining lease) must be assumed to be a property right, even though the Regulations are not specific on the matter.⁹² What is more, mineral exploration

⁸⁹ *Tener* per Estey J. at 564.

⁹⁰ *Steer Holdings Ltd v Manitoba* [1993] 2 WWR 146 (Man CA).

⁹¹ There have been efforts to get to grips with the question in British Columbia and the Northwest Territories. Report of the Commission of Inquiry into Compensation for the Taking of Resource Interests (R. Schwindt, Comsr), Victoria, 1992; Nigel Bankes, “Is British Columbia Leading the Way in Natural Resources Management? Part II: Ethics and Resource Takings: The Schwindt Report” (1993) Resources No. 41; Whitehorse Mining Initiative Leadership Council Accord, Final Report, Nov 1994, pp. 18-21; D J Pitman, “GNWT Compensation Study”, unpublished, 1996.

⁹² *Isaac v Cook* (1982) 44 C.B.R. 39 (N.W.T.S.C.) held that a claim under the Canada Mining Regulations is an interest in land. While the B.C.C.A. has diverged from this (*Cream Silver Mines Ltd. (N.P.L.) v British Columbia* (1986) 2 B.C.L.R. (2d) 392 (B.C.C.A.)), there is good authority for basing the analysis on the character of the rights overall rather than on statutory definitions: *Clarkson v Wishart* [1913] A.C. 828 (P.C. Ont). Generally see Barton, *Canadian Law of Mining*, chap. 16.

properties are highly speculative assets, and are difficult to value in cases where a payment of compensation is to be made.

In the United States the issue of “regulatory takings” has been an important one in natural resources policy for some time. The American constitution protects property against taking without just compensation. A “property rights” movement has promoted takings bills in Congress and state legislatures in order to secure compensation for a wide range of agency actions that limit or diminish the value of property, including mining and forestry rights.⁹³

The Present System Plus: Modified Free Entry

Map selection would make no change or improvement to the existing free entry system under this head.

However, the suggested modifications of the mining law in order to clarify its relations with environmental law should promote integration and should reduce the tensions between the two. Clarity would be improved by those modifications; modifications to make it clear that the holder of a claim or a lease must comply with the environmental law, that the mining law provides no exemption, that the holder of a claim or lease cannot use those mining rights unless the environmental law allows it, and that there is no right to compensation if the environmental law prevents or restricts mineral activity. Such measures should provide benefits by improving clarity, lowering unduly high expectations, reducing compensation claims, and (above all) making it clear to regulators that they have the authority, and the active duty, to control or curtail mining activity where necessary. The legislation would send clearer signals.

These general modifications would be strengthened by the suggested specific changes to require, or to monitor, compliance with environmental and land use legislation.

Modifications of the mining law to improve the land-use management system and to provide discretionary powers in specific cases could also make useful progress towards integration of the disposition legislation and the environmental legislation. The former, furnishing a more elaborate withdrawal system, would operate in advance, reducing conflicts. Conditional withdrawals could allow limited exploration to proceed under notice of specific environmental or land use problems that may prevent the authorization of further work in the future. The latter, authorizing limited restrictions on the granting of claims, could bring the tenure system more into parallel with environmental and land use regulation.

⁹³ J. Sax, “Takings Legislation: Where it Stands and What is Next” (1996) 23 Ecology L. Q. 509; J. P. Byrne, “Ten Arguments for the Abolition of the Regulatory Takings Doctrine” (1995) 22 Ecology L. Q. 89; M. Graf, “Application of Takings Law to the Regulation of Unpatented Mining Claims” (1997)34 Public Land & Resources Law Digest 219, reprinted from 24 Ecology L Q 57; B. H. Thompson, “Resource Use and the Emerging Law of ‘Takings’: A Realistic Appraisal” (1996) 42 RMMLI 2-1.

Administrative Title

An administrative title system has the potential to avoid many of the difficulties caused by poor integration of the mineral and environmental bodies of law. Above all the Minister has the power to decline an application for a mineral disposition. He or she could well be expected to use that power in a way that would forestall problems. (The Minister's ability to do so would be controlled, in administrative law terms, by the purposes for which the legislation expressly or impliedly conferred that power.)

As we have found previously with an administrative title system, much depends on the way that the system is established. Again, Australia provides helpful examples of different possibilities. The example of Western Australia is closer to the Canada Mining Regulations in that there appears to be little integration of mining and environmental law. The two function separately; it is doubtful that environmental considerations can properly be taken into account in deciding whether to issue a licence or lease. (One aspect of the relationship is spelled out in the Mining Act 1978, section 6, which states that the Act must be read and construed subject to the Environmental Protection Act 1986, and that any provision which is in conflict with it is inoperative to the extent of the inconsistency.⁹⁴) On the other hand, in New South Wales the approach to integration is different from both Western Australia and the Northwest Territories. The Minister may not issue a mining lease under the Mining Act 1992 before a development consent has been obtained under the Environmental Planning and Assessment Act 1979. The Minister is not so restricted in issuing an exploration licence, but is obliged to take environmental values into account in doing so. Mineral title is therefore controlled by environmental and land use decisions, and not the other way around.

Mineral Leasing

Mineral leasing systems generally allow the Minister to decline to post lands, and as in an administrative title system the power could be used to promote integration. Apart from that opportunity to maintain control, a leasing system could be little improvement on a free entry system. In fact, the sense of explorationists of an entitlement to proceed with mineral activity would be heightened if they have paid the Crown cash bonuses to secure their acreage. Where environmental restrictions prevent activity, there would certainly be talk of refunds.

Mineral Concessions

⁹⁴ Hunt, 1997, para. 170-90.

A mineral concession agreement that receives ratification by a special Act can provide a very direct solution by putting aside both mineral and environmental legislation and replacing them with a single integrated code to address all aspects of a project. However the manner in which a concession is negotiated would raise questions about the balance chosen between mineral and non-mineral values.

7. LOCAL BENEFITS AND OTHER SOCIETAL PURPOSES

It has been quite common for natural resources legislation to contain requirements expressing policy objectives other than resource development and control of its effects. At one time, clauses for the refining of ores within Canada were common. Then for some time Canadian ownership restrictions became frequent. The policy that attracts significant support at the present is not dissimilar. It is local benefits; employment, training and business opportunities that are to flow to the local community as a result of a mineral development project.⁹⁵ As a sustainable development matter, the objective can be described as promoting equity and equitable sharing of the costs and benefits of development. The criterion to be applied therefore is: an opportunity to require a local benefits agreement to be completed, whether with aboriginal groups, community groups or government.

The Present System: Free Entry

The Canada Mining Regulations contain no requirement for mine developers (let alone explorationists) to provide local benefits. There is no power to impose terms and conditions in the issue of a record of a mining claim, whether to impose that requirement or indeed any other. As for leases, the extent of the Minister's power to include special covenants in a mining lease has already been discussed. In fact there may not be any such power. Certainly there is no specific mention of local benefits. The situation is similar to *Athabasca Tribal Council v Amoco Canada Petroleum Co*⁹⁶ where an aboriginal group wanted an affirmative action program to be put in place under the approvals for an oilsands project, but where, in spite of generally-phrased powers to impose terms and conditions, the purposes of the legislation governing the approvals process were held not to extend that far.

⁹⁵ J. Keeping, "Local Benefits and Mineral Rights Disposition in the Northwest Territories: Law and Policy" in M. M. Ross and J. O. Saunders (eds), *Disposition of Natural Resources: Options and Issues for Northern Lands* (Calgary: Canadian Institute of Resources Law, 1997) p. 180.

⁹⁶ [1981] 1 S.C.R. 699 (Alta). There is an inconsequential difference in that *Athabasca* dealt with a condition in a regulatory approval rather than a condition in a disposition of resource rights.

This contrasts with oil and gas development, where in plain terms the legislation implements a policy decision to require local benefits packages. The Canada Oil and Gas Operations Act⁹⁷ requires a benefits plan to be submitted and approved by the Minister before any oil and gas operations can begin (unless the Minister waives the requirement), and that requirement is incorporated by reference in the disposition legislation, the Canada Petroleum Resources Act.⁹⁸ (In practice, applicants for an exploration licence are simply required to accept a general policy statement on the subject.) The Canada Mining Regulations also stand in contrast to the provisions of land claims agreements in the Northwest Territories. Different provisions may be made for aboriginal-owned lands and for other lands in the settlement region.

For the diamond mine that BHP developed at Lac de Gras, a local benefits package was a major issue. Because there was no statutory requirement for one in the Canada Mining Regulations or anywhere else, the federal government tied the issue of a water licence under the Northwest Territories Waters Act to significant progress on the negotiation of local benefits agreements. There are good grounds for doubting whether this expedient would have survived a legal challenge.⁹⁹ Further, the company and the local communities were obliged to proceed without any clear rule to state who had to be negotiated with, or what the agreements should contain. The agreements remained confidential. It can be strongly argued that a basic policy such as local benefits requirements should be implemented directly in legislation.¹⁰⁰ Legislation would secure the policy from being destroyed by legal challenge, and it would reduce uncertainty about what projects are subject to the policy, what procedures would be followed, and what controls are in place. It would therefore benefit both industry and the local communities.

The Present System Plus: Modified Free Entry

Neither map selection, nor improved land-use management systems, nor clearer relations with environmental law bear on the question of local benefits. The conferment of limited discretionary powers on the Recorder or Minister would be effective for this purpose if the powers especially as to the imposition of terms and conditions included local benefits in express terms.

Administrative Title

An administrative title system could address local benefits. If the ministerial discretion to grant or withhold a disposition, and the power to grant one subject to terms and conditions, are silent on local

⁹⁷ R.S.C. 1985 c. O-7 s. 5.2(1).

⁹⁸ R.S.C. 1985 (2nd Supp.) c. 36 s. 21.

⁹⁹ Keeping, *op. cit.*, p. 199.

¹⁰⁰ The legislation could be a new Act, an amendment to the Territorial Lands Act, or (possibly) an amendment to the Canada Mining Regulations.

benefits, then uncertainty would arise about the purposes for which the Minister could legally exercise the power. Express provision for local benefits would therefore be desirable.

Mineral Leasing

A mineral leasing system could address local benefits, and, if it is to, it should do so under express provisions in the legislation. While it would perhaps be possible for the Minister to decline to post land until a benefits agreement had been negotiated, the decision could be open to legal attack if it was not supported by the Act. In any event, it would be a clumsy approach, for a company is unlikely to be willing to enter into complex negotiations with a local community when there is a good chance that it will secure the land. (Nor would the community be keen to spend time negotiating with all possible bidders.) More likely to be viable is the scheme in the Canada Petroleum Resources Act, where bidders know that the successful bidder must obtain approval of its local benefits plan before exploration or development work can begin.

Competitive bidding raises the possibility of bidding on the criterion of the local benefits package. The winning bid would be the one with the best local benefits package. A method would need to be worked out to rate packages.

Mineral Concessions

Whether ratified by a special Act or not, a mineral concession agreement could provide very fully for local benefits. However the manner in which a concession is negotiated would raise questions about the adequacy of the package and its weighing in relation to other policy objectives such as revenue and environmental protection.

TABLE: SUMMARY OF THE EVALUATION

	SECURITY OF TENURE	EFFICIENCY OF PROCEDURE	PROPER RETURN FOR THE CROWN	MINIMAL HARM TO LAND IN ACQUIRING TITLE
<i>PRESENT SYSTEM: FREE ENTRY</i>	Low security. Ground staking.	Quick and simple. More expense in field.	Royalties on production.	Some disturbance from ground staking.
<i>PRESENT SYSTEM PLUS: MODIFIED FREE ENTRY</i>	Map selection offers better security. Not a ground-based system.	Map selection simpler. Not a ground-based system. Referral procedures may lengthen process.	Royalties on production.	No disturbance from map selection of claims.
<i>ADMINISTRATIVE TITLE</i>	Good security.	Longer and less certain process but higher degree of certainty at end.	Royalties on production.	None.
<i>MINERAL LEASING</i>	Good security.	Predictable procedures; longer than free entry but may be shorter than administrative title.	Bidding on cash bonus (or work, benefits, etc) at exploration etc stage. Royalties on production.	None.
<i>MINERAL CONCESSIONS</i>	Good security especially if ratified. Political uncertainty.	No certainty as to process or resulting rights. Long process. Confidential. Difficult to obtain ratifying Act.	Royalties and other payments the subject of negotiation	None.

	APPROPRIATE DECISION-MAKING POWERS	INTEGRATION OF LEGISLATION	LOCAL BENEFITS
<i>PRESENT SYSTEM: FREE ENTRY</i>	No power in hands of government to vet claims or leases, to impose terms. Withdrawal powers used more.	Little integration. Conflicting signals from mining and environmental legislation.	No requirement for benefits agreement.
<i>PRESENT SYSTEM PLUS: MODIFIED FREE ENTRY</i>	Better withdrawal procedure. Power to vet claims, to impose terms. Linkage to land use planning.	Clarified relationship with environmental law. Links to land use planning.	Act may expressly allow terms to be imposed on claims and leases for a benefits agreement.
<i>ADMIN- ISTRATIVE TITLE</i>	High degree of discretion. Needs to be structured. Fewer withdrawals. Link with environmental legislation.	Potentially high level of integration. Very high if procedure links mineral title and environmental approval.	Depends whether discretion expressed to permit local benefits to be considered
<i>MINERAL LEASING</i>	Power to decline to post. Discretion over bidding criteria, but criteria and terms fairly fixed. Fewer withdrawals.	Little integration.	Successful bidder can be required to make a benefits agreement. Local benefits can be a criterion for bidding.
<i>MINERAL CONCESSIONS</i>	Highest degree of discretion. Flexible. No rule as to priority of applicants. No certainty about process.	Potentially high especially if agreement ratified by a special Act.	Potentially high opportunity for local benefits. Tradeoffs not explicit.

PART IV: CONCLUSION

1. INFORMATION NEEDS

This study has identified a number of points where there is a shortage of information and where research would be useful. Clearer information is needed about practices in the mining industry and about practices in the administration of legislation, and about understandings and perceptions. There are a number of reform possibilities that could be clarified by thorough comparative studies of other jurisdictions.

Research would be desirable on:

- Whether and to what extent the free entry system results in environmental degradation that would not have occurred under different systems of title. Case studies would help to clarify the significance of this possibility.
- The pattern of administrative action, under the Canada Mining Regulations, on the issue of licences to prospect, the issue of permits to prospect, the use of conditions in mining leases, and the withdrawal of lands from mineral entry. This would explain how important discretionary powers are exercised in practice at the present.
- Perceptions among industry and administrators of the degree to which mineral exploration and development can legitimately be restricted under environmental and land use regulation. It has been mentioned that an assumption exists that mining can be regulated but cannot be prevented.
- Law and practice in jurisdictions where free entry has been abandoned, e.g. Alberta and Australia. One particular issue for investigation is the ability of industry to function and prosper under administrative title and other regimes.
- Map selection in Quebec. Information is needed about administrative questions and industry perceptions. Levels of exploration activity under map selection should be investigated, adjusting for other variables in the exploration climate.
- Ground staking. The size and economics of the part of the exploration industry that depends on ground staking.
- The extent to which significant environmental damage is caused by the need to stake claims on the ground.
- The cost of staking disputes and insecure title, including the costs of uncertainty, delay, restaking, inability to proceed with transactions, cost of finance, and litigation.
- The costs of administering mineral title records under different title systems.
- Comparison of the exploration and development processes for hardrock minerals and oil and gas etc. where mineral leasing with cash bidding has been successful.

Dialogue about the future of mining law can sometimes proceed on mistaken assumptions about the facts. It can sometimes proceed on mistaken assumptions about the seriousness of one possible deficiency or another. This study has considered a number of possible deficiencies in the existing system and in alternatives to it, but more practical research along the lines suggested here would help people engaged in the dialogue to make well-informed judgments about their importance. Once the difficulties are identified and understood, progress can be made to remedy them.

2. KEY THEMES

One of the persistent themes in this discussion has been the need to make decisions under conditions of uncertainty - uncertainty as to the nature of the mineral resource, and as to the nature of environmental and land use values. Uncertainty is greatly increased by the concealed character of the mineral resource, and the necessarily lengthy process of mineral exploration and development. Uncertainty requires us to look carefully at the allocation of discretionary powers between developers and regulators, and the at different stages in the mineral exploration and development process.

Another theme has been that legislation should send consistent signals. We do not find consistency in the signals presently sent by the mining law and the environmental law. The relationship is complicated by the presumption in the free entry system that mineral activity is a permitted, in fact a priority, use of land. The present legislation permits entry on land for staking and for low-level activity without any land-use permit. Its assertion of primacy influences regulators, and fosters an assumption that in any individual case mineral activity can be constrained and regulated, but not prevented. It leaves land use managers open to claims of regulatory taking. It sends signals that a miner who complies with the mining law will have a right to explore and to mine. This puts the mining law and the environmental law into an uneasy relationship, and an unsatisfactory relationship if one believes that decisions under the mining law should not control environmental law outcomes.

In comparing options, one notes the virtues of speed, simplicity and connection with the land itself that are offered by the free entry system embodied in the Canada Mining Regulations, even if the results, in terms of security of title, are often imperfect. The fact that free entry has deep historical roots does not in itself mean that it is obsolete; it has modernized considerably in different jurisdictions in Canada. It may be particularly appropriate to the context of mineral exploration, although perhaps not to its relations with other land use needs. The comparison of options shows that there is a trade-off between the speed and simplicity of free entry with systems that may be slower and more complicated, but offer greater clarity in environmental and land use outcomes. The process under say an administrative title system may be slower, but it can lead to a clearance on those other fronts, both for present operations and future ones, that is not available under the free entry system.

Of the options that have been presented here, the ratified mineral concession agreement perhaps offers its great flexibility and comprehensiveness at too high a price in uncertainty and opacity. The option of minor modifications of free entry may be something of a compromise, but carefully focussed reforms of this kind may actually be able to deliver most of what is needed.

A final theme that runs through the comparison of the different options is the importance of properly-structured discretionary powers. The different options have varied considerably in this respect, but a number of occasions have been noticed where discretionary powers could be better designed. More could be done to lay down the procedures to be used, the proper considerations to be taken into account, and the possible outcomes. The result would be a reduction of uncertainty, to the advantage of both mining interests and environmental and other land use interests. It would however require legislative commitment. We as a society would be obliged to decide more clearly the general principles that should govern the allocation of mineral title and the balancing of mineral interests with other interests.