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Corporate Communication Standards, Practice and Issues Access to Information: A Key to Building Trust in the Minerals Sector

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Executive Summary

The international mining industry is dominated by public companies listed on stock exchanges in Canada, Australia, the United States of America and Great Britain. Corporate practice for the release or disclosure of information by these companies follows common patterns dependent on the type of company (size and business culture), project stage in the mine cycle, the types of information flow or conduits, the audience or stakeholders addressed, and the location (head office or project/operation site) emitting the information. A fundamental dichotomy is noted between information flows around corporate head offices and project/operations sites which are typically in very different geographic locations.

In general, the companies are driven by regulatory requirements for the disclosure of information set out by the stock exchange and securities commissions – core corporate/head office functions - and by reporting required by other authorities such as environmental or fiscal bodies where exploration or mine operations are located. The most important audience for information is considered to be the shareholders, followed by regulators and, at a distance, interest groups and local communities at project sites. Other information pathways involve communications between companies, among industry professionals and with financial institutions. Without question, the most complete disclosure of a mine project comes with the presentation of an Environmental Impact Statement during the permitting process for new mines.

A distinct difference exists between Junior (exploration only) companies and the Intermediate and Senior companies that have operating mines. This is partly accounted for by the question of materiality in reporting – Junior company threshold for materiality is much lower- and partly by the need for the Juniors to raise equity financing to maintain their operational capability. As a result there is much more information released by Junior companies aimed at their shareholders and potential shareholders.

For all companies the regulatory reporting requirements represent a significant investment in time and money. In the present depressed market, the Junior sector feels over-regulated to the point that its ability to communicate effectively with other stakeholders is significantly impaired.

Trends in best practice in all sectors (Junior and Senior) are towards greater dissemination of information to the community and local interest groups at project and mine sites. There are also trends towards extra-regulatory reporting such as environmental, social and sustainability reports and greater inclusion and transparency in communications with nontraditional stakeholders such as non-governmental organizations.

The key question facing the industry is whether improved access to information can be best achieved through further regulation or by peer pressure and the general adoption of best practices across the sector?

I Introduction

I.I Background

Ian Thomson Consulting has been retained by the Mining Minerals and Sustainable Development (MMSD) project to prepare one of four background papers to inform an experts workshop on "Information Availability: A Key to Building Trust in the Minerals Sector". The objectives of this study are to explore the issues of access to information around mining projects and mechanisms for improving communications among stakeholders affected by the mine cycle. Ultimately, the experts workshop will also be challenged to identify what forms of information disclosure and communications practices support the industry move to embrace sustainability and, importantly, what forms of regulation enhance or constrain their capacity for same.

I.2 Scope of Paper

World wide, the mining industry is a large and complex grouping of business activities, which range in size from independent artisanal miners through to multinational corporations. To maintain focus, the present paper is limited to an assessment of the activities of public companies traded on stock exchanges in Canada, Australia, the United States of America and Great Britain (which comprise the vast majority of all publicly-traded mining entities), and patterns of information disclosure around the mine cycle (the full range of operations from exploration through mine closure and reclamation). Particular attention is given to companies involved in metals mining; coal and industrial minerals (with the exception of diamonds) are excluded. Within these boundaries, the paper examines existing patterns of information dissemination together with attitudes and policies towards the disclosure of information to stakeholders, *as seen and experienced by the industry*.

I.3 Methodology

The paper is based on a review of regulatory requirements for the disclosure of information by public companies in Canada, Australia, the USA and Great Britain, together with regulations for the provision of financial, operational and environmental information in selected Latin American countries with significant mineral production. This is supplemented by examination of corporate documents, including annual reports, health, safety and environment reports, press releases and reference to the report "Mining: A Survey of Global Reporting Trends" (KPMG, 2001). To gain greater insight, focus group meetings with members of the industry were held in Toronto, Calgary and Vancouver, together with a number of personal interviews. The authors of this paper have also drawn on their own experience in the industry.

1.4 Conceptual Structure of the Paper

In order to understand both current practice and potential to change patterns of information disclosure and information flow structures in mining, this paper examines not only current practice, but also the structures that govern them. To do so, the authors have developed a conceptual framework for the paper wherein the following are held to be essential aspects relating to information flows:

- The type of company releasing the information the corporate culture;
- Types of information flow the conduits;
- The stage the project in the mine cycle/type of activity;
- The stakeholders communicated with the community of interests; and
- The location of the project.

2 Key Characteristics of the Mining Industy

For the purpose of this paper, a number of key characteristics of the mining industry are highlighted because they appear to strongly affect the manner in which information is managed by companies. Comprehensive descriptions of the present make up of the mining industry in North America, Australia and Latin America are being prepared elsewhere by MMSD.

2.1 The Mine Cycle

The extractive aspects of the mining industry comprise a sequential series of activities known collectively as the "Mine Cycle". This begins with exploration, the search for new mineral deposits, and continues with the evaluation of a resource, feasibility studies, an environmental impact assessment (EIA), permitting of a new mine, construction, operation of the mine, closure and post mining environmental rehabilitation¹. The character of reporting, disclosure and availability of information tend to be different in each of these phases.

2.2 The Mineral Production System

The corporate sector studied in this paper can be generally considered as a vertically integrated mineral production system as described by MacDonald (2000). This model, originally applied to the Vancouver based mining companies, appears to be valid elsewhere and identifies a hierarchy of companies feeding mineral properties forwards and also striving to grow upwards. The principal components of this system are:

• Junior Companies. These are dedicated to exploration, the discovery and evaluation of mineral deposits. For the most part they sell or venture their discoveries to larger companies that have the financial and technical ability to develop and mine the resource. Nevertheless, when the opportunity arises, these companies may attempt to grow by putting a mine into production by them selves. These companies are wholly dependent on risk capital to fund their activities, either raised through the stock market as equity finance or from joint ventures with major companies. From a human resource perspective, junior issuers are typified by limited internal administrative capacity; as stated by a junior industry consultant –

there's a geologist or two, and probably somebody they've known for years who takes care of their records.

¹ For a more extensive description of the mine cycle, consult Cranstone, Lemieux & Vallee, 1994 (in Lemieux: 2000).

- **Intermediate Companies.** Typically, such companies operate one or more small mines. They may also have their own exploration teams or choose to replace reserves by purchasing properties from the junior sector. The intermediate companies employ equity and debt financing and are limited in their growth by the need to raise equity for major acquisitions and mine construction.
- **Major/Senior Companies.** These companies typically have several large mines and are internally integrated with divisions specializing in exploration, mine development and production. Many also have downstream smelting and refining capability and are involved in the marketing of metal product. They are able to replace reserves by purchasing properties (or companies) from the junior and intermediate sector or by making their own discoveries. These companies are able to self-finance exploration and acquisitions and have access to debt financing to build new mines.

The different types of companies not only have different roles in the mineral production system, they also have different needs and practices in the management of information and patterns of disclosure to third parties. For example, the strong dependence of the junior sector on risk capital raised in the equity markets makes them more open and aggressive communicators with information about the success or potential success of their projects. Corporate cultures of different-sized mining firms can therefore be said to govern the capacity to report to - and level of priority given - different stakeholders. This becomes problematic when you look at mining as a production system, where projects are passed off (with all of their problems intact) from juniors to seniors through the course of the mine cycle, as these different firm types will tend to use different communication strategies with the *same audience*.

2.3 Geographic Distribution

Numerically, the largest number of mining companies is domiciled (location of head office and/or stock market listing) in Canada, followed by Australia and the United States. The Canadian industry is dominated by a large number of junior (exploration only) companies, with significant representation of intermediate and major firms. The junior sector is less numerous in Australia where the intermediate sector and major firm sectors are proportionately significant, as they also are in the United States. Great Britain is home to some of the largest mining corporations (eg. Rio Tinto, Anglo American) and a very small but vigorous junior sector.

Whilst domiciled in specific countries, the companies are frequently active internationally and have projects or operations in one or more foreign counties. The most active area of foreign exploration and mining outside the traditional developed country "home places" is currently Latin America, followed by South East Asia and Africa. Legal requirements for the disclosure of information are often very different in the home county of the company and the host country of the project or operational unit.

When projects/operations are in the home country, these activities are almost always remote from the head office, which is located in a city, creating different communities of stakeholders in the various locations.

2.4 Implications for Information Flows

The structural characteristics of the industry, together with the geographic separation of head office from project/operations sites create a series of factors that strongly influence the patterns of information transfer by mining companies. The more significant of these factors are as follows:

- Public companies are required to report or disclose certain types of financial and administrative information as part of securities regulations and to conform with the rules of the various stock exchanges; patterns that will be discussed in more detail in this paper. Conceptually any event that changes the value of the company should be reported. In practice, the regulations require only those events that have a "material" impact are reported. What is "material" depends on the size of the company. Thus, for a junior company engaged in exploration a relatively small event can impact the value of the company, for example the discovery of an outcrop of mineralized rock. In contrast, an event may not be "material" for a major company until it impacts bottom line revenues by tens or hundreds of millions of dollars. As a result, this paper will give separate consideration to the patterns of information flow around junior, intermediate and major/senior companies.
- The geographical separation of head office and project/operations sites means that various units of the company may be in different jurisdictions with different reporting requirements. As a consequence, this paper will differentiate between the nature of information flows around company head offices (core corporate activities) and the project/operations sites, and aspects of their inter-relationships. The stakeholders and information types prioritized at both sites are usually quite different and on occasion at cross purposes to one another.
- In addition to information provided by companies to meet the regulatory requirements for public companies, permitting of operations, environmental performance, and the legal and fiscal information requested by host governments, there are also patterns of information flow to various stakeholders and interest groups. These can be loosely classified on the basis of the stakeholders involved and will be discussed as such in this paper.

In summary, therefore, information flows around the mining industry are complex and governed by the type of company, stage in the mine cycle (exploration, feasibility, production, etc), geographic location of the head office or project/operation, and the stakeholder group to which the information is directed. This paper is intended to provide an overview of these activities and aid identification of areas where a greater contribution to security and sustainability may be achieved.

3 Core Corporate/Head Office Information Flows

For the average chief executive officer, the primary function of his company is to create shareholder value by generating both revenues through production (large firms only in most cases) and appreciation in its stock price (all firms). Deriving directly from this, the most common corporate perspective among mining firms, large and small, is that information release is a tool used to communicate with the primary audience of the company: shareholders, potential shareholders and other key business contacts. Communication from the head office is largely intended to attract and maintain investor interest - thus the moniker *investor relations*. All other forms of communication are generally considered to be secondary, indeed distracting.

Despite this, some of the largest demands for information placed upon the firm are generated by regulatory actors. In fact, the primary forms of information flows at the head office level are administrative and financial reporting. For the company, these forms of communication are thus perceived as a necessity of modern business practice and of primary emphasis alongside investor relations.

3.1 Stakeholders And Audiences

The modern mining industry is beholden to a great number of stakeholders, yet corporate communications, especially those generated from the "home place", are often extremely limited in their target audiences. The primary audience for corporate communication is the aforementioned shareholders and potential shareholders. However, the capacity of the firm to focus on its primary audience is reduced somewhat by the "burdens" (seen as such by the firms) placed on them by regulatory agencies, with the head office focusing on reporting to financial and administrative authorities. Common to all constituencies are:

- The stock markets that the publicly traded mining company trades on which require all press releases and publicly released information to fit within restrictions on prediction, and that firms disclose any information that may affect their stock price (the so-called test of materiality); and
- The securities commissions that govern all publicly traded securities make similar demands that firms disclose material changes in a timely manner, and provide assurances to shareholders that no conflicts of interests are harboured in the company.

The amount of data required in both of these core corporate "assurance" processes is voluminous.

With the massive amount of information required by both primary (the investing public and regulators) audiences, information demands by all other parties are of secondary concern. However, there is a difference in the priority level even among secondary parties. The "second tier" of audiences includes other companies in the industry (particularly those located in the same head office city), banks and finance institutions holding loans to the mining company, employees of the corporation, industry analysts (who have very close ties to - and power of suggestion over - the investing public), industry associations and professional societies. All of these groups are "plugged in" to the information chain, formal and informal, of the mining industry.

Not "plugged in" to any significant degree are other so-called "external" stakeholders. Nongovernmental organizations (NGOs) and other civil society groups seeking information about the company's activities, the general public, and other communities of interest, are relegated to a distant third in the race to access information from mining companies at the head office level. In addition, many firms argue that information demands at the head office actually *limit their capacity* to communicate at the project level with locals and civil society, a discontinuity examined further herein.

3.2 Regulatory Requirements

The stated goal of both the stock exchange and security commission regulations is to protect shareholders while facilitating efficient capital markets. Broadly stated, stock exchanges focus more on creating and maintaining financial requirements for listing on their exchanges, while securities commissions focus more on the legitimacy of the corporation's activities and structures, and the accuracy of information released to the public. Both groups demand disclosure of variations on the following information types in order for a listed public company to remain in good standing:

- Generation of prospectuses to justify the issue of securities (shares), requiring expert construction and certification of the information issued;
- Quarterly and/or annual reports of financial and administrative data, distributed to both the regulatory bodies and shareholders in a recognized format and audited by an accredited third party;
- Disclosure in news releases and/or electronic filing of any event or activity that is "material" to the corporation, often also requiring (as in the case of exploration results and ore resource/reserve estimations) certification by a "qualified person"; and
- Any other reports required by the regulatory bodies to protect the interests of shareholders from false or misleading information and to prove that the corporation fits within the business activity parameters required by the trading exchanges.

Because their activities *should* complement each other, securities commissions and stock exchange regulators make every effort to dovetail their standards together. For example, in Canada the Toronto Stock Exchange released Disclosure Standards for Mining Companies in 1999, in close proximity temporally and in content with the securities regulators' National Policy Instrument 43-101 on mining company disclosure. Nonetheless, many mining companies have grave concerns about the amount of duplication and subsequent costs associated with reporting requirements to market regulators.

The prospectus, a formal document disclosing considerable information about a company and its assets, mines and exploration properties, is required for most equity funding (sale of shares) exercises by public companies. Such documents are prepared at arms length from the company with technical information verified by independent experts, thus providing for a high degree of objectivity. The Prospectus is normally a public document although its circulation may be very limited and essentially inaccessible for communities adjacent to mining or mineral exploration projects. They may be extremely technical as well, again limiting their accessibility. Industry members frequently question the usefulness of these highly complex and labour intensive documents –

I defy you to make sense of a prospectus an inch thick. Nobody ever reads them.

Reporting, listing and disclosure requirements differ across national boundaries, making listing on certain exchanges easier for small capitalization (always junior) vs. large capitalization (typically major) mining companies. This can affect the relative strength of the mining sector in certain countries (or at least in those cities that support mining head offices), as seen in recent years with the rise of the Alternative Investment Market (AIM) on the London Stock Exchange. AIM has become a vital junior financing market because its listing and reporting requirements are generally perceived to be less onerous than those found in Canada or (especially) the USA². The USA has one national securities commission, the Securities and Exchange Commission (SEC), which is generally held to have some of the most stringent listing and reporting requirements for mining companies in the world (thus, many ostensibly American corporations lists their securities in other countries, usually Canada). While Canada remains the largest mining finance raising country in the world, the UK and Australia (Australia's large firm sector now raises as much capital as Canada's large firm sector) have been capturing more market share.

Canada's National Policy Instrument 43-101, which came about after (but only partly because of) the Bre-X situation, is seen by many in the industry as central to the problems associated with current "head office" reporting regulations. "43-101" governs disclosure standards for mineral projects, requiring a recognized "Qualified Person" to fill out technical reports in a specific way, and replaces National Policy 2a. One of the major differences between the two is that while NP2a was a guideline, 43-101 is a law. The junior sector of the mining industry has been critical of the imposition of 43-101, arguing that it adds costs without reducing the risk to investors of fraud and scams. It is worth noting that Australia set the precedent for this type of control with a similar requirement for a "Competent Person" to complete all technical reports.

For mining companies the disclosure of mineral resource and reserve estimates, the direct expression of the core asset value of the corporation, are an important aspect of communication, not just with regulators but also with shareholders and potential shareholders. One has to question whether resource/reserve reporting should be considered project or head office communications. Clearly, they are derived from individual projects, but while the local community adjacent to the mine or exploration project site may be very interested in these numbers, the company tends to see their most important audience as the shareholder base and potential investors. It is further noteworthy

² Perception is the key word here. Of late, some industry insiders have been reassessing the simplicity of listing and reporting requirements on AIM. While it remains attractive for very small or inexperienced listers because it has no minimum capitalization or previous trading experience requirements, concerns have been raised about reporting costs. Ironically, it has been the passing on of the regulatory burden to "sponsor" companies from the hands of market regulators that is seen as raising costs. Apparently, sponsor companies are more rigid than regulators on bureaucratic "T crossing and I dotting" in reportage.

that even in an increasingly international industry, it is the securities and exchange commissions at the head office of the company, rather than the host country of the ore deposit, that govern regulations over the assessment of ore resources and reserves.

Currently, efforts are being made to create internationally accepted resource and reserve reporting standards (Rendu, 2001), so that countries like the US will join the majority of countries in accepting resources *and* reserves in corporate communications, not just the latter:

Internationalization of the world mining industry has exponentially increased the need for effective means of communication...Only if meaningful international standards are available and enforced can any of the parties involved make sound decisions concerning their participation in the projec" - (Rendu, 2001).

Calls for global standardization of reporting have now moved beyond this type of reporting to elements of all aspects of mining. Standard setting efforts such as the Global Reporting Initiative (GRI) recognize the key fact that corporations, investors and projects are all "going global", yet must communicate effectively with local communities of interest on a project by project basis.

Disclosure of corporate activities to the regulators and investing public is becoming a full time job for many head office personnel. For example, all Canadian firms must complete both annual and quarterly reports with full financial statements and a management discussion and analysis of activities which are filed with regulators and distributed to shareholders. Each report takes a great deal of time and effort to compose, and many in the industry question whether they are read by many of their investors, or any of the regulators! Again with Canada, disclosure documents must be filed under the SEDAR system, which in itself is being revamped at present to become closer to real time and with the intention that *electronic* disclosure become the norm in the near future (which it already is in the United States). Associated with this type of information release is the requirement to have a "general meeting" of shareholders at least once every year. These events ensure at least one opportunity for direct interaction between the company and its owners every year.

Finally, it is important to understand that regulatory disclosure is heavily influenced by the concept of *materiality*. This is a confusing and weakly defined term, as evidenced by the following definition (three definitions in fact) from the Australian Institute of Mining and Metallurgy (2001):

'Material/Materiality' means any information of such importance that the inclusion or omission of the data or information concerned might result in the reader of a report reaching a different conclusion than might otherwise be the case. In particular, Material data and information is that which would reasonably be required in order to make an informed assessment of the subject of the Report. The Australian Society of Accountants' Standard AAS5 proposes that, as 'useful benchmarks', the Materiality of information or data can be assessed in terms of the extent to which its omission or inclusion could lead to changes in total value of: Less than five per cent - immaterial; Between five per cent and ten per cent - discretionary; More than ten per cent - material; and the Supreme Court of New South Wales has stated that something is Material if it is significant in formulating a decision about whether or not to make an investment or accept an offer.) Firms are expected to release to the public any information that is perceived to be "material" to the value of the corporate stock. This is usually in the form of news releases, but the audiences are limited because the distribution of these documents to regulators and shareholders is the only requirement. All other stakeholders need not be contacted, and frequently are not.

The Toronto Stock Exchange acknowledges that materiality will vary with company size, what is material to a small company will be insignificant to a large one. The test of "materiality" thus provides at least a partial explanation for the markedly different disclosure practices of junior and senior companies.

Patterns for Major and Intermediate Companies

The differences between junior, intermediate, and senior companies include firm size, organizational culture, and exposure to different environments. For example, a representative of a "global giant" corporation is often less involved in the multitude of activities required of the president of a junior firm. Typically, while senior companies have more people working on issues such as communications, risk analysis, community interaction, etc., these individuals work in isolation from other people in the company. This makes identification and disclosure of information critical to various stakeholder groups much more difficult to co-ordinate, effectively widening the rift between head office and project-based communications.

Two aspect of regulatory disclosure by major and intermediate companies are particularly important in the context of the present paper. These are reporting in multiple jurisdictions and the impact of the test of materiality.

Many of the major companies are listed on more than one stock exchange. Generally they have a home country listing and a secondary listing on one of the New York markets, a strategy to gain access to additional shareholders and also senior financing. As a result they are obliged to report to both sets of regulators which usually have different rules for reporting specific financial information and accounting principles for such things as depreciation, reclamation costs, and ore reserves. The results can be most confusing. As stated by the corporate communications manager of a major,

you can look at the stuff we file in Toronto and New York. It's the same information but because it has to be presented in different ways, unless you really understood what is going on you could reach very different conclusions about our company.

In addition to the potential for confusion there is the more immediate question of duplication of time and effort and - most significantly - costs in meeting these regulatory requirements.

The test of materiality means that many activities of consequence to local communities, most particularly projects at the exploration stage, are too small to be considered "material" be a large company and are simply not reported. By way of example, Rio Algom (now part of BHP-Billiton) was able to take the Spence Project, a large copper deposit in northern Chile, from discovery to feasibility before making a full disclosure of the deposit. Until the resource was defined and determined to be potentially an economically feasible mine, it simply did not impact the value of the company "materially". It can be argued that as long as materiality is governed by a formula related to firm size, projects run by large comapnies will suffer from "information buffers", separating actors "external" to the industry's information pipeline from key project data.

Companies large and small are critical of the move in Canada to require release of quarterly reports, alongside existing requirements for annual reports and the release in news release form of any "material" data about the companies activities. Senior companies consulted argued that quarterly reports serve little purpose, and their imposition is just another form of regulation that rarely reaches either its intended goals or intended audiences.

Patterns for Junior Companies

Most junior companies are primarily concerned about the ability to raise money needed to advance the potential of their exploration projects and as a result have two major regulatory concerns at the head office level.

- The continual effort to maintain themselves as publicly-traded corporate entities and thus have access to the venture capital pool, which means fulfilling all of the administrative and financial requirements of their two main regulatory audiences.
- To express the perceived value of their properties to shareholders and potential buyers in such a way that it gains attention yet conforms to the regulatory instruction that

the reporting of preliminary exploration sampling or geophysical results [are not] constructed so as to unreasonably imply that potentially economic mineralization has occured. Companies and promoters should accurately describe their preliminary results (NAPEGG, 1997).

According to both industry members and regulators, the vast majority of junior companies *do* stay within their reporting requirements for accurate and professionally verified exploration results.

In practice, junior companies are constantly trying to attract the interest of investors. This, together with the fact that because of their small size almost any positive development in an exploration project can be considered "material", results in a steady stream of information about exploration, evaluation and development projects. The result is diametrically opposed to the flow of information from "major" companies, as expressed by this senior firm exploration manager:

There is a dynamic there that exists between a group that sees a benefit in releasing as much info as possible (partly to be clear to their shareholders, but also to create excitement) and a group that sees information flow as only necessary to meet regulatory approval, or such material goods such that there is an upside in the Profits: Earnings relationships.

It is this drive to communicate the value of the firm to the investing public, and some of the outcomes associated with illegitimate speculation (Bre-X for example), that has provoked

developed countries' regulatory agencies to exercise stronger controls over information release.

Despite these concerns, the junior sector desperately wants all of its stakeholders to understand that it faces a dilemma. The problem involves the costs of being a public company in an era of heightened information/disclosure/regulatory demands, versus the actual capacity to perform the core functions of the firm; the discovery and delineation of mineral resources. At present, the head office function has become the overriding concern of the majority of smaller firms in the mining industry, to the point now where many do not believe they have the resources needed to deal with the demands of stakeholders at the "project" level. For many junior companies then, regulations now guide not only their actions, but also their very existence! All other forms of communication are thus preempted by economic and regulatory "survival strategies".

3.3 Other Core Corporate/Head Office Communications Activities

A growing number of communication vehicles are being produced by mining companies, generally the majors, which bridge the gap between regulated and unregulated communications. Relatively unregulated information transfers such as annual reports, Health, Safety and Environment (HS&E) reports, statements of business practice, and more informal types of communication are prepared alongside of regulated quarterly and annual financial reports and press releases.

Annual reports and other core corporate communications, despite being based on information up to two years old by the time of publication, are known as "forward looking" documents. In recent years, they have become more controlled by securities regulators (with requirements for disclaimers on the risky nature of investment in each document, among other rules), yet they still involve degrees of flexibility beyond other regulated reports. At the core, an annual report for a mining company is the premiere "sales pitch" for the organization and as such the information within, especially about project potential, has to be treated with caution. A similar caveat must be made for the growing number of environmental and "sustainability" reports, which are, with a few notable exceptions, prepared without any form of independent verification. Nonetheless, this form of information transfer is a useful guide to the reporting priorities of firms.

Major and Intermediate Companies

Major and intermediate-sized companies are involved in a great deal of unregulated information release, although the type of information released varies widely from that released by smaller firms. "Large" firms are often more proactive and interactive in engaging so-called "external" stakeholders constructively on issues of policy. For example, Falconbridge recently invited a representative of a prominent Canadian environmental NGO to communicate *with them* at an internal board meeting on the progress of their environmental programs. These interactions are not always this positive, of course, and many large firms feel that the NGO sector simply adds another layer of bureaucracy through their reporting demands.

Health, safety and environmental (HS&E) reporting straddles the line between project and head office reporting, and also between regulated and non-regulated disclosure. Much of the information released is based on regulated activities (monitoring and reporting), but its compilation and release to the public is not necessarily mandated or regulated. Information on employee safety, water and air quality, downstream effects mitigation, and (of late) socio-economic health of surrounding communities are often included, but the resulting document is not normally subject to review or audit for completeness or accuracy. HS&E data is useful to producing firms in the sense that it both confirms a reporting requirement to government regulators on a project-by-project basis, but also advertises the corporations willingness to subscribe to the goals of employee protection and, more recently, sustainability.

Mining companies have increasingly passed their annual reports and specialized documents such as HS&E or statements of business practice³, along to "host state" communities, in part because these communities would be able to access this data anyway through the auspices of NGOs with links back to the "home state". Australian and Canadian companies have been at the forefront of this move. In recent years, there has even been some criticism that corporations from developed countries coming to developing nations are "ramping up" expectations at the project level:

We had Peruvian companies complaining about our reporting on community health and reporting how much we invested in historical reclamation. They said they couldn't possibly meet those standards so we made them look bad.

One of the major issues facing larger companies is the compartmentalization of communication into a single department, rather than its diffusion to all working units in the organization. At major companies, only in very rare instances is there direct communication between management and the general public; each release of information has to go through the "information experts" who work for the company. The corporate communications or investor relations (IR) department feeds its initial draft of each form of information to management, who add varying degrees of insight (or rubber stamp, as it may be), and then pass it that back to IR, which take charge of information releases. Inevitably, the IR team overlay their understanding of what the audience want/demand into communications with both management and the outside world. These "middle men" thus play a key role in the filtration (and possible alteration) of information between the firm and its stakeholders. In junior companies, a direct interaction between management and the audiences is more the norm.

It is common in senior companies to find that questions which go beyond the immediate interest, knowledge or focus of individuals are referred to other departments. For example, the case of the exploration managers that won't talk about communications with NGOs or local communities, not because they are not exposed to these issues, but because that is "someone else's department". This head office bureaucratic attitude can become a problem

³ Pasminco Limited, an Australian company, reflected the increasing importance of dealing with aboriginal groups (and importantly, *being seen* to be dealing with aboriginal issues, in its recent publication of "Working with Aboriginal Communities" - Pasminco Limited (1999) - the first publicly available "stand alone" corporate document to devote all its energies to dealing with issues specific to indigenous groups.

at the project level, because *all* corporate employees are on the front line there, and must be skilled communicators or face communication breakdowns and misunderstandings.

A second, related issue for larger companies questions whether the information relayed is truly consistent with the operational practices of the firm. Much of the information relayed to the public through corporate documentation resembles "cookie cutter" policy-making, to the point where some corporations simply parrot statements by other companies or industry organizations - "We have a written sustainability policy, which basically embraces the Mining Association of Canada's policy". Or worse, engage in what can kindly be termed "recycling" of other people's ideas.

Comparing Intermediate and Major Companies: While they are grouped in this analysis, the actual capacities, priorities and actions of senior/major and intermediate/mid-sized companies differ widely in reporting/communication issues. Intermediate-sized companies are similar to juniors in that they have to focus on adding value to their share prices, because they have little access to other sources of capital (ie: the debt financing available to larger, more soluble firms). Their self-promotion is thus highly aggressive, akin to that of juniors, and geared more toward investors than the general public or interest groups, audiences that industry leaders have come to address more in their documents. In addition, intermediate-sized firms often lack the human resources and experience to produce separate health, safety and environment documentation for public use, and generally only report to the required regulatory bodies on these activities.

Despite these differences, intermediates and majors are similar in that they both focus on existing, operating mines rather than future opportunity such as the results of their exploration programs. Because of this core corporate focus on extraction, intermediates are exposed to local communities on an ongoing basis rather than intermittently, like juniors are. As such, intermediates "best practices" attempt to emulate the proactive reporting standards of larger firms, and both firm types are more readily able to achieve a healthy balance between core corporate/head office reporting and project reporting.

Junior Companies

Junior companies are less likely to involve external stakeholders in their communications pipeline at the head office level. Again, the key targets are shareholders, potential shareholders, and anyone who may be able to advertise the perceived value of an investment in the company (eg. analysts and other companies). Communications with these actors are often informal, over the phone or over lunch, and corporate managers, constrained by "insider trading" laws, have to be careful not to release any information prematurely in these conversations.

Aside from the cost issue discussed previously, much of the unwillingness by juniors to directly engage "external" stakeholders can be attributed to ill will generated on both sides in *prior* communications. Over time there has developed a powerful "us vs. them" attitude between junior explorers and the environmental NGOs, in particular.

4 Project/Operations Based Information Flows

Information flows at the project level can be envisioned as moving in a linear fashion along the mine cycle from exploration through mining to closure and beyond. At each stage along the cycle there are different needs and requirements for information.

4.1 Stakeholders And Audiences

From the point of view of the companies, their first obligation at the project level is to maintain the program in good standing with the regulatory authorities in the host country, province, state or territory, and meet all legal requirements. Normally, their next priority is their employees followed by the local community and then other interested parties and stakeholders. Responsible companies are, however, responsive to local circumstances and, whilst this overall priority rating may remain, the allocation of resources will often be adjusted to meet perceived needs. Thus, should there be a need to address community concerns, concerned companies will move to accommodate this reality.

Companies operating in foreign countries also consider it important to maintain regular contact with the consulates of the "home country" and with the mining representative of the "host country" government.

4.2 Regulatory Requirements

Operating mines and mineral exploration projects are usually structured as subsidiary companies or operating units of the parent public company, often domiciled elsewhere, and are not subject to the same regulatory reporting requirements as the parent. In situations where the operation is in a separate, foreign jurisdiction the result is that much corporate information may be essentially unavailable in the host country. There are however specific regulatory requirements for the conduct of exploration and operating a mine, which are usually met by the local management.

In recent years, there has been bitter opposition to what mine operators consider to be an over-bureaucratization of the governmental regulators and regulations designed to monitor their activities. In the US, it has been estimated there are more than three dozen federal environmental laws governing mining activities (National Mining Association, 2000). In Canada, certain jurisdictions have been criticized not only for the legislation governing mining, but the application and governance over those regulations. For example, the ability to explore or open new mines in places like British Columbia (often considered one of the most difficult jurisdictions for exploration in the developed world) is limited by what one respondent called "bureaucratic expropriation".

The process of globalization has involved the structural reform of mining, environmental and fiscal legislation in many countries around the world. For the mining companies, the result is a remarkable parity from country to country in the regulatory requirements, most notably in Latin America where the industry is very active. From the point of view of the companies, these countries, whilst having similar rules for doing business, are seen as having a lesser bureaucratic burden and thus more friendly towards mining.

Exploration (Junior and Major Companies)

The initial stages of exploration, prospecting and reconnaissance studies are traditionally conducted without the need for permits or disclosure of these activities. Exceptions to this norm occur where the work takes place on private land when permission to enter the land is required. By extension, this practice also applies to reservations and other lands owned by indigenous peoples as are found in Canada (Nunavut is the largest example), Australia and the United States. In the latter jurisdiction, mining companies and tribal groups often enter into formal agreement to permit exploration.

In Latin America, where International Labour Organization Convention 169⁴ (ILO 169) has been adopted by many countries, there is increasing pressure to apply the provisions of this convention and ensure that indigenous groups receive prior notification of mineral exploration campaigns. Leading industry practice appears to be ahead of governments in applying this principle with examples such as the consultation mechanisms set up with the Shuar of southern Ecuador by Billiton and Corriente Resources.

Once exploration reaches the stage of disturbing significant areas of ground, making excavations or drilling test holes, some form of permission to carry out the work is required in almost all jurisdictions. This normally takes the form of a work permit obtained from a government agency, often linked to a statement of environmental impact and an obligation to mitigate impacts and reclaim the land after use. The application for a work permit will include a work plan that is disclosed to the permitting authority, which may in turn share the information with other agencies. For example, in Canada applications for exploration work permits are typically circulated among ministries responsible for mining, environment, fisheries and forestry, while in Bolivia the information circulates between the ministry of mines and environment. In Canada, the application may also be forwarded to first nations groups in the area of the work program and also interested third parties such as environmental NGO's. When working on privately owned land, including land owned by indigenous peoples, the agreement of the land-owner is required. Obtaining this agreement may often require disclosing a work plan and making a commitment to clean up and restore the land after use.

Local communications are often considered onerous for two reasons, one having to do with the type of work explorers do, and the other concerning *the way they see* the work they do. The first problem has to do with time. Exploration is a dispersed, episodic activity, with short burst of high intensity work punctuating otherwise complete inactivity at any given site. Explorers often have short windows of opportunity in which they can go in and explore their landholdings. Information disclosure requirements can easily get in the way of this process:

In Northern BC, whenever you want to drill the Minister of Mines and Environment had to send out letters to the native groups and other people to see if anybody objected to it. The problem with that of course is that you need 60 days on (60 days working on site) before that can happen. It may be great in principle but in practice it does not work out

⁴ International Labour Organization C169, Indigenous and Tribal Peoples Convention adopted in 1989, has been ratified by Argentina, Bolivia, Columbia, Costa Rica, Ecuador, Guatemela, Honduras, Mexico, Paraguay and Peru in Latin America and also by Denmark, Fiji, Netherlands and Norway.

very well because in many of these places, especially where we were working, at 6000 feet elevation, a maximum two and a half month window of when you can work. And sometimes you don't know if you are going to be able to raise the money until 30 days before you have to go to work.

Secondly, explorers generally consider their "ecological footprint" to be very small in most projects and often use this rationale to argue that "external" communications are not necessary until the development level. Thus, reporting solely to regulatory standards and only with regulators is the typical communications pattern at the field project level.

Across the Americas and Australasia, there is no legal requirement to give prior notice to local communities of exploration work, only to deal directly with individual owners of surface rights. Companies are, however, being encouraged to communicate their intentions to local populations although as yet only Peru has produced formal guidelines (Leon, 2001).

Environmental Impact Assessment and Permitting

The Environmental Impact Assessment (EIA) process, which has become standard practice prior to gaining approval to operate a mine, includes preparation of an Environmental Impact Statement (EIS), the single most complete description of a project released into the public domain. The EIA and accompanying EIS are tools used to demonstrate that a mine can be operated in a manner that is environmentally safe and socio-economically acceptable. Both governments and financial institutions require satisfactory EIS documentation in order to be confident of the overall technical credibility of a mining venture. Local communities, interest groups and non governmental organizations are also increasingly concerned that the EIS be credible to them as well and that the project is indeed socially acceptable.

For all mining companies, the EIA is seen as a "hurdle test" that a project must clear before mining can take place. The content of the EIS document is normally defined in local regulations, although a general parity can be observed following the structural reforms of the 1980s and 90s. There are, however, differences in both the contents of the documentation and technical specifications to be achieved or considered acceptable. This has resulted in companies taking various approaches to the EIA process.

Some companies consider the EIA on a country specific basis and look to meet the minimum requirements needed to gain the necessary approval to proceed. This attitude seems to be most common among intermediate and aspiring junior companies and may reflect their combination of high expectations and limited financial resources. An alternate view, common among the international mining companies, is that the project should be able to pass the EIA test in both the host country and the home (head office) country and construct an EIS document that meets the higher of the two standards. If there is any further ambiguity the company will often choose to also meet the World Bank guidelines and thus be sure of meeting the terms of international financing institutions.

Throughout the Americas and in most of Australasia, the EIA regulations now include some form of public participation and it is generally intended that the EIS be a public document. In practice, the situation is quite variable and a number of issues arise, including:

- The accessibility of the EIS documentation, and
- The degree of interaction between the project proponent (the company) and project affected people and,
- The response of the project to community concerns.

A range of circumstances exists with respect to accessibility. In Canada and the United States, the requirement is that copies of the EIS documentation are made available to project affected communities and to other interested parties who request them. Many other countries, Honduras for example, have similar rules. In contrast, the current regulations in Peru only require that the documentation be available for inspection at the Ministry of Energy and Mines in Lima and at regional offices. An additional consideration is the degree to which the EIS can be understood by project affected people. The EIS is normally written for the company by expert consultants who prepare detailed technical descriptions and analysis intended to be read and assessed by other experts familiar with the science and the language employed. As a result, the EIS may be all but unintelligible to the general population. Chile is one jurisdiction that has recognized this problem and now requires the company to prepare a version of those parts of the EIS that have direct relevance to local people using common language so that is can be understood by all.

The degree of interaction and response to community concerns can also be highly variable. In Canada and the United States, the EIA process includes public hearings at which interested parties may make presentations, ask questions and challenge aspects of the EIS. In Peru, by way of contrast, the public is limited to making written submissions to the regulatory authority who will provide written responses. Recent statements from the government of Ecuador suggest that it is still technically possible to satisfy the regulations by having the project presented in Quito alone.

Trends in the regulations in developing countries and industry best practice call for greater community involvement and transparency. The World Bank guidelines have played an important role, as has pressure from indigenous groups wishing to have more control over development in their traditional lands. In Latin America, ILO 169 is again an important instrument for empowering indigenous communities by its requirement that they be consulted over development projects.

The pattern that has evolved is one that generally follows the World Bank guidelines, which call for two stages of public consultation. The interpretation of what is meant by consultation is variable and the mining companies currently employ a variety of strategies. Three appear to be of consequence.

1. The traditional approach is that of preparing a mine development plan and accompanying EIS documentation which supports the plan. This is disclosed to the local population, typically in an open house presentation at which people can ask questions. The company will have attempted to anticipate the questions and have prepared answers. There is no attempt or intention to change the plan to accommodate

local interests or concerns. This approach of decide, announce and defend is possible but increasingly unacceptable to local communities.

- 2. In recent time, a significant number of project have applied a two stage approach in which the project design and EIS are presented to project affected people and other stakeholders who are invited to ask questions and voice their concerns. The company then analyses these inputs and may modify the project to accommodate these ideas, needs or concerns. The company then returns to the community and stakeholders and presents the project again showing where it has made changes and explaining why other requested modifications could not be made.
- 3. Current best practice employed by a few companies is to engage in a process of continuous dialog and consultation as plans for the project evolve and the EIS is prepared. A high level of interaction is possible, community needs and concerns can be discussed early and built into the mine operational plan, EIS studies and documentation. While effective and considered to be a model way of doing business, this approach is not popular with many in the industry because of a perceived loss of control on the timing and costs associated with a mine development.

Mine Operations

Once in full production, an operating mine is normally required to provide certain financial and production data to the host government on a regular basis, often monthly, in order to facilitate the collection of taxes and/or royalties. In addition, failures to meet health, safety and environmental standards usually have to be reported to a regulatory body and the operation may be subject to inspection or audit. Such data may or may not be made public, depending on local policies and practice. Companies may make information on health, safety and environment available to interested parties, often as summary data in annual reports. This may not always be possible. For example, in Peru under the former Fujimori government, public policy required that mining companies provide environmental performance data to the Ministry of Energy and Mines, and that only the Ministry could release such information to third parties. (This policy has subsequently changed and companies are now free to release environmental performance data to anyone.)

Of particular significance to producing companies, particularly in the developed nations, has been the documentation of "big picture" items such as environmental emissions. In the USA, the Environmental Protection Agency has a Toxic Release Inventory (TRI) covering almost 650 chemicals and substances, which demands that every mine site publish the amount of materials released to the surrounding environment (National Mining Association, 2000). This becomes controversial from the company's point of view where, under TRI, mines have to report the movement of naturally occurring substances such as overburden and waste rock as toxic releases. This, the companies see as illogical and distracting from "real" issues (to them) of genuinely toxic substances.

Additionally, a general emphasis on the mechanics of environmental performance deflects attention and human resources away from other important aspects of information transfer, like community interaction. The inclination for mining companies to focus on environmental releases, while less inclined to examine social concerns, is attributable to both corporate culture and the culture of the home country of the corporation. Miners are trained in the physical sciences. This is where their main core competencies lie. It is perhaps understandable then that they focus on technological applications to solve problems. Furthermore, their shareholders and corporate roots are in developed countries where a strong environmental ethic prevails.

Health, Safety and Environment (HS&E) departments have become major forces in the cataloguing and reporting of mine site activities. This has been as an outgrowth of the goals of protecting employees, the ideals of environmentalism, corporate recognition of the key role played by human resources, and most recently the move to embrace sustainability.

Mines financed by international loans may be subject to independent audits and reporting to the banks or international finance institutions such and the IFC. While the IFC has policies on transparency and the release of information, other banks tend to retain the information as confidential.

Post Mining: Closure and Reclamation

In the past, the industry has been highly criticized for not "cleaning up after itself". This has led in most developed (and an increasingly large number of developing) countries to legislated requirements regarding the post-mining phases of development. Indeed, it is now the norm in most jurisdictions (and World Bank Guidelines) that a plan for closure is part of the EIS/EIA for permitting at the start of the life of a mine.

Requirements are generally in the form of a plan matched to reclamation bonding (often including depositing the necessary funds for cleanup in a sealed account *prior* to project startup) and both reporting and inspection by the regulator of the progress of reclamation/remediation after mines closure. Whilst there is considerable controversy as to the adequacy of the bonds, there is nevertheless a complimentary process of monitoring and inspection before bonds will be released that provides some level of accountability.

Many of the larger companies have compiled and released reports of their reclamation success stories, as part of a larger campaign to prove their new emphasis on sustainability. These reports often appear in corporate annual reports or as supplementary documents. They are not regulated documents in and of themselves, which leaves the audience to decide whether these efforts have been meritorious or not. The use of third parties to monitor these cleanup stages and verify the reporting, providing both transparency and a measure of accountability, is the current "best practice".

Smaller producers have neither the resources nor inclination to go beyond regulated reporting to governmental agencies. One of their perceptual concerns (often shared by larger producers) is that reporting publicly can have one of two responses: absolute silence (nobody cares if you do something right) or absolute hostility (if you do anything wrong, you are assumed to have done *everything* wrong). An example occurs with the reclamation of a mine-site with high arsenic levels in the environment. The question never arises: was the area naturally prone to high arsenic in the local geology, or was it the miner's fault? For the miner, this sort of "no win" situation often also occurs in areas of high sulphide mineralization, where naturally occurring acid drainage is common.

The industry is still developing standards and practice for providing information around closure and no clear pattern exists. Some companies, for example Placer Dome when closing the Equity Silver Mine, describe advising the local community of their plans for long term remediation and management of acid mine drainage.

4.3 Extra-Regulatory Activities

Exploration

Exploration is a problematic phase of the mine cycle in terms of information flows due to a variety of reasons including:

- Most exploration projects fail to become mines. Thus, from the company point of view, there is little to tell to local populations until it is evident that the ore deposit under exploration has the potential to become a mine.
- Exploration is an incremental process with the size and value of a mineral deposit revealed slowly. It is thus not possible to talk confidently about the scale of development and impacts (both positive and negative) until late in the process.

Question: When do you start consulting with locals?

Once we get to the development stage, we make a more concerted effort to let people know what is going on –President, Exploration **Junior**.

We think it should be day one. Biggest mistake people can make is to go look for stuff, find it and then think they can go make a deal with the locals – Exploration Manager, Global **Major**.

Most exploration groups would rather not talk about the results of an exploration program and potential environmental and social impacts of a project on the local community, preferring to communicate with their shareholders and regulators. A major concern is that by talking about a project too soon the company may create unrealistic expectations on the part of the local community and be faced with demands for benefits that are out of proportion to the present value of the resource. This duality has led to a number of difficult situations, particularly with junior companies, where conflicting information has been provided separately to shareholders and local stakeholders. In a number of cases optimistic reports of new mineralization have been relayed to shareholders while no information or perhaps a more conservative picture has been given to local stakeholders. For at least three junior companies, this has led to conflict.

In general, exploration groups feel comfortable talking to local stakeholders about the process of exploration and the economic benefits of mining. A common sentiment found in interviews is that the exploration team has to "sell" the positive aspects of mining and so bring the local community on side with the company in supporting the project. Of course, there is a fine balancing act between "selling" a project and falling prey to misunderstandings developed from unrealistic expectations, a situation all miners seek to avoid.

Local project management is typically responsible for the design and execution of all communications programs. The mechanism of communication is generally personal contact with community leaders and talking about the project and the benefits of high paying jobs with locally hired employees. More expansive communications programs are sometimes mounted, particularly for larger or more advanced projects and those in populated areas, that use local media, notably radio and print, and community meetings.

A number of exploration groups, in both major and junior companies, describe a more complete communications practice in which local communities are briefed directly on the results of the exploration program, their significance and the next steps in the exploration process. Several respondents noted that this might be an ideal circumstance but also commented that local communities seldom have the ability to understand the geological and engineering data and are "more interested in jobs, anyway".

During the later stages of exploration and feasibility studies, all companies describe a concerted effort to communicate the benefits and opportunities that a new mine might bring to local community or surrounding district. Many companies appear to approach this phase with an a-priori assumption that the mine will become a positive experience for all and that there is a need to inform and educate the local population about this reality. A minority found in the ranks of both junior and major companies, take a more pragmatic approach. These companies talk of needing to help the community understand what will happen if a mine eventuates, the importance of identifying potential vulnerabilities, recognizing cultural sensitivities, and carefully matching expectations to economic potential of the resource.

On the basis of interview responses, the amount of effort given to extra-regulatory activities during exploration depends on local management and its perception of both the project environment and how work should be carried out in the field. Management tends to be most influenced by pressure brought to bear by local and external stakeholder groups, the financial status of the company (what can we afford?) and the strength of the project, and is typically responsive rather than pro-active in its posture. Corporate behavior ranges from being secretive and isolationist to being overly optimistic, creating expectations for a future that most exploration projects will not fulfill; strategies that can be equally problematic in terms of the relationship with local stakeholders.

Leading practice for explorers (there are both junior and major company examples) appears to take the form of a staged approach to communications around a project that is intended to inform and involve the local people. Some critical elements include.

- Meeting with community leaders before exploration begins to introduce the company.
- Providing information on the proposed work program ahead of any activity.
- Reporting results to the community using simple language.
- For larger and later stage (feasibility) projects, creating some form of consultative or liaison mechanism with the local community to exchange information on the project and also receive information from the community.

Project Transfer: a Key Intercorporate Communication Node. Essential to the reality of mining as a production system, is the notion that the vast majority of successful projects are not explored, developed and mined by the same firm. Rather, they are passed from junior firms to larger entities (and perhaps back again) at key stages of the mine cycle, in what often resembles a revolving door of project control. Typically, projects are passed from junior explorers to senior "miners" before the EIA and permitting process is undertaken. Not only is this an area of concern for communication continuity with external stakeholders, because different companies may have different perspectives on how to communicate with locals, NGOs and regulators, it is also a major communication pathway between companies (intracorporate). The due diligence, legal and acquisition processes on an individual project take on average between 3 and 6 months to complete in which clear and legitimate information is demanded of both parties to the agreement. This process can also be an important one for the establishment of strong engagement strategies with local communities. Because it is usually larger firms acquiring projects at the development stage, they can exert a great deal of pressure on smaller firms to have a solid communication policy with people in the local situation. As one senior executive put it:

We demand that both partners and external contractors have an environmental policy and a social responsibility ethic, all that has to be in place before we work with them... Their getting the locals "on side" is a huge bonus for us. We have a checklist of the types of things we expect to see on the local side of things, a good way to analyze both the site and the firm, and we have yet to have any major problems in the sites we have used this analysis on.

Environmental Impact Assessment/Permitting

In recent years it has become the norm for a new mine operation to participate in some way in the greater economic and social development of the community. This is separate from any regulated requirement and is most visibly part of project planning where indigenous and aboriginal communities are involved. Typically a community benefit program is offered when the mine begins operation which includes such items as preferred access to employment, use of local service and supply companies and some form of economic and/or social development assistance.

In Canada and Australia a pattern has been established of Impact and Benefits Agreements with local indigenous groups. These are negotiated agreements, which lead to civil contracts between the company and the indigenous group. As such they are private, commercial agreements and may or may not have involved disclosure of financial information on the feasibility of the project. A trend towards regulation is evident with agreements mandatory for new mines on Inuit land in Nunavut and the requirement for made for the Ekati And Diavik diamond mines in the Northwest Territories to conclude agreements with local first nations before final permits were issued.

An important recent development in disclosure around the question of providing benefits has been publication of the distribution of rents from the Diavik diamond mine project in the Northwest Territories of Canada, as estimated in the project feasibility study. Subsequent negotiation of Impact and Benefit Agreements with several First Nations groups took place with all parties aware of the benefit available for distribution.

In other countries, companies are providing similar benefit packages but, as yet, there has not been comparable disclosure of the economics of a proposed mining project. For many mining companies, the disclosure of economic benefits is seen as problematic, creating unrealistic expectations at all other projects, regardless of their economic margins. This is one type of disclosure many in the industry feel they could do without - confidential agreements would be preferred, according to this exploration geologist:

BHP has priced everybody out of the market up there. You can't get any work done without a native group driving up looking to negotiate an IBA.

Operations

Mine operations are most frequently stand-alone situations with considerable local autonomy. The mine may have its own communications and community relations staff who manage information flows or, in the case of smaller operations, these functions may be carried out by the mine manager. Operational information shared with employees may reach a wider audience by word of mouth, alternatively a structured communication program may exist.

Many operating mines have established formal communications mechanisms to provide information to employees and local people. The company newspaper or magazine is the most common format. Their content is typically news of productivity, health safety and environmental issues, and profiles of individuals. More specific information on the business of the mine may be shared with labor unions, employee associations (in nonunion mines) and community leaders.

A distinct trend among mine operators is to provide more information on environmental management and, in a growing number of instances, greater community involvement in environmental issues. For example, the results of environmental monitoring to meet regulatory requirements are made available on request. A much greater transparency has been achieved at a number of operations, for example the mines operated by Cameco in northern Saskatchewan, Canada, and the Antamina mine in Peru, where community based environmental committees have been established. These groups have access to all environmental monitoring and reporting and may even participate in sampling and assessment of the results. Further transparency, and accountability has been sought by a number of companies, for example Placer-Dome, by submitting environmental performance at mine sites to external audit and publishing the results.

A mine is an industrial work site with significant hazards. Nevertheless, several companies point to the fact that their mines offer tours to the general public as evidence of making their activities more transparent and better known to non mining members of the community.

5 Other Information Pathways

5.1 Professional Communications

Mining companies of all types frequently participate in the disclosure of detailed scientific, technical and operational information. For all reasonable purposes, the intended audience is other members of the mining industry and stakeholders already closely linked to the industry such as investors, analysts and academic researchers. Two formats are commonly employed:

- Professional papers and technical communications published in journals, proceedings of conferences and meetings, and the academic press. For the most part these are highly detailed and employ relevant technical language to describe specific aspects of an exploration project or mining operation. An exception to this pattern is the exploration case history in which the technical and scientific procedures applied in the discovery of a new mineral deposit are documented in a broader, descriptive format. Professional papers typically report on activities or investigations that took place some time before publication. The audience for these publications is almost exclusively other technical specialists within the industry and academe.
- Reports and articles on exploration projects and mining operations in trade magazines, newspapers and journals. These typically describe new discoveries, new mines, expansions or improvements and are published shortly after the events took place. These communications often describe technical and operational aspects of the prospect or mine in detail, particularly reserves, productivity and efficiency. The language employed is less technical than that used in professional communications but is still heavily laced with industry jargon accessible only to the intended audience of industry insiders and stakeholders already knowledgeable of mining.

5.2 Mining Analysts

Mining companies of all types have a history of providing information to financial analysts who rework the data and communicate their findings to existing and potential investors, typically with an accompanying recommendation to buy, hold or sell the company's shares. A recent task force set up by the Toronto Stock Exchange and the Ontario Securities Commission has come forward with recommendations on standards of practice for information release to industry analysts and brokerage houses, wherein analysts are forbidden from having access to information not already available to all shareholders. The new regulations have been drafted with a view to eliminating the risk that premature information release may be used for a form of insider trading. In the USA, the recent passage of tough "Public Disclosure" laws forbidding selective information release may go a long way toward cutting down on this practice.

5.3 Industry Organizations

Industry organizations exist in all the "home countries" and most of the countries where the international mining companies are active (many are global also), and cover various issues specific to national interest, commodity types, and firms of different sizes, to name just three. These organizations have proliferated in the past couple of decades, as mining companies have recognized the benefit of pooled resources, collective representation and action. These organizations provide a central storehouse for information at the same time as being a focus and forum for communication of the industry's issues, lobbying government, engaging with special interest groups and communicating with the general public, activities that transcend the individual firm.

Many in the industry want their organizations to lead the way in

engaging external stakeholders, the public at large and governments about the long-term role of mining in industrial society.

In several countries, industry organizations have responded with the dissemination of educational information about mining such as the "Mining Matters" program for elementary aged children created by the Prospectors and Developers Association of Canada.

It would also appear that industry organizations may play the key role in establishing "best practices" - setting the norms by drawing attention to good examples through case study examinations, developing policy and practice guidelines on behalf of their members and encouraging companies to adopt these standards. Industry organizations have identified this sort of *intraindustry* information dissemination - for example the "E3" initiative of the Prospectors and Developers Association of Canada to produce guidelines for the environmental management of international exploration projects - as an activity that has the potential to benefit external stakeholders as well.

6 Web Based Communications

Almost all of the mining companies have web sites, which typically contain basic corporate information, and a description of company policies, assets and corporate objectives. The web site is often based on the annual report, backed by more extensive descriptions of the mining or exploration projects that the company considers important, press releases, copies of analysts reports, speeches by the President or CEO, etc. Many junior companies have also found this to be a useful cost cutting mechanism, reducing the amount spent on investors packages mailed out to interested investors during the mining market downturn.

The information has been essentially unregulated but normally based on information produced within the regulatory framework. Of late, certain exchanges (eg. the CDNX) have taken to treating web sites identically to all other forms of disclosure, and regulating them. For example, statements similar to those used in annual reports admitting the "forward looking" nature of the content are now required. These web pages are not yet acceptable as the *only* form of disclosure on any information in Canada, while the US' SEC *will* accept web releases as the primary form of information transfer.

For the majority of companies, the prime web site audience is shareholders and potential shareholders. A minority of the major companies has started to use their web pages to disseminate additional information on company performance, most particularly the environmental performance of individual mines, in a conscious effort to achieve greater transparency and engage a broader audience. It is anticipated that this will expand to close to real time disclosure of environmental data with information transmitted simultaneously to regulators and the website.

With respect to web based communications, the industry is deeply concerned about the lack of regulation of the sites of actors opposed to mining. Mining companies argue that they are at a distinct disadvantage in the net-based public relations game, because while their statements of practice and policy are subject to regulatory overview, their opponents are not and often *"perpetrate the most outrageous inaccuracies"*. And with the massive complexity of the Internet, it is very difficult for companies to keep track of what is being said about them. One senior company representative stated that

if you put our name in a search engine, you will get over a thousand hits. Only one of them is sanctioned by us.

7 Issues in Information Disclosure

7.1 Information That Companies Are Reluctant To Share

Discussions with a representative number of industry personnel suggest that there is very little information that a company is ultimately unwilling to share. Nevertheless, there is caution about how information is handled that might raise emotions or cause irrational concerns. Furthermore, there are some areas that may be regarded as "taboo" and a more general fear that there is a risk that information may be used against the company.

It is perhaps this latter fear that causes most of the industry to be openly cautious and skeptical of greater access to information. Three situations are commonly mentioned:

- Many exploration groups would prefer to say as little as possible about their activities in order to avoid attracting the attention of "anti-mining activists". A sentiment exists that it is necessary to "fly under the radar screen" of such groups and individuals and thus avoid the risk of harassment, particularly during the early stages of exploration on a property when the company is just getting established on the ground. The more constructive companies argue that this can allow them to build a relationship with the community in relative calm, for others this is justification for withholding information from the community.
- Among mine operators, there is wide concern that releasing information on environmental performance, particularly water quality, air emissions and solid wastes, would provide "anti-mining groups" with ammunition to use against the company. This fear seems to be unfounded; both Placer Dome and Noranda talk of laboring extensively over the decision to release all environmental data for their mines and anticipating negative comments over performance. In fact, both companies report that to this date nothing untoward has happened. The only noticeable effect has been an end to requests from non-governmental organizations for such information.
- In developing countries, Health and Safety data is not infrequently retained for internal use and referral to regulators because it may be cast in a bad light when compared to the performance of first world mines. For example, one respondent noted that it would

bankrupt an intermediate sized mining company to attempt to bring an existing Latin American operation up to North American safety standards in a short period of time. Thus, even though many public companies are investing heavily to improve Health and Safety in developing countries, they would still prefer to keep some of the outcome confidential.

What, then are the "taboo" areas?

The companies are particularly concerned with maintaining competitive commercial advantage, which usually translates into keeping confidential certain technical expertise and intellectual property. Two areas are most frequently mentioned:

- Geological information that would allow the company to find new ore reserves and
- Process technology that would improve the efficiency and/or profitability of mine operations

Beyond these absolute positions there are some general principles that the companies all subscribe to.

- 1. The companies wish to avoid disclosing their activities during the initial, reconnaissance phase of exploration, the looking phase, and protect their ideas and knowledge of where a new mineral deposit might be located. There is justifiable concern that, until a land position is firmly established, other companies might jump in and take up land speculatively, frustrating the exploration process.
- 2. Similarly, there is reluctance to engage the local community in full dialog and consultation over the potential for a mine until late in the process of discovery and evaluation. The reasons for this are quite straightforward most exploration projects fail! There is thus a concern about raising false expectations in the community by talking about mining operations too soon.
- 3. The feasibility study is generally regarded as a company confidential commercial document with highly sensitive information on the future profitability of the corporation. Not all companies subscribe to this and, indeed, there is a measure of ambiguity about how the feasibility study is handled with financial analysts and others given at least partial access to the information.
- 4. Operating mines regard detailed information on production costs to be necessarily confidential and that release of this data could affect their position for long term contracts with suppliers.

Certain national traits are also noted. In general, the Canadian and Australian companies believe that they are more willing to share information than United States based companies, which tend to be seen as having a more conservative corporate culture.

Stakeholders that Companies are Reluctant to Share With

With the rise of civil society and NGOs of various types, the mining industry has often adopted a defensive stance to communicating with these actors. The junior sector, especially, spoke up about the dangerous side of information release:

any information in the hands of NGOs can be damaging to us... we fight tooth and nail not to give them any information.

What has caused this "us vs. them" position to be created? For one thing, the NGO community has been extremely vocal and highly skilled when it opposes aspects of particular mining projects and/or the industry in general. In addition, their critiques are seen by the industry as being "bullet proof":

The playing field is not fair. We are regulated to death while the NGOs are totally free-form.

The industry is thus very jaded against the fact that regulators don't regulate the information flows from other stakeholders.

Despite their reservations, mining companies both large and small are coming to realize that they have to engage with these stakeholders. They reality is that not responding and not getting involved is damaging in and of itself:

The catch 22 is exposed: if you don't give out information, your silence is assumed to be some sort of guilt. If you do give out information, it is corrupted from its original spirit and used against you there too.

There are obviously unresolved issues that currently interfere with proactive relations between mining companies and these stakeholders, not least of which are the counterproductive perceptions created by the entrenching of positions on the many sides of the "mining debate".

7.2 Cost

Commonly stated in development studies is the concept that

beyond a certain point of poverty, thinking about sustainable development becomes an unaffordable luxury.

The junior mining sector would subscribe to this notion currently, as the cost of reporting to regulators has become a major issue for the companies. Meeting regulatory requirements is a significant burden and there is a feeling, particularly among the Canadian juniors, that the industry is significantly over-regulated. For example, many Canadian junior companies are spending 25 - 40% of their corporate budget on regulatory reporting while at the same time being required by the CDNX exchange to spend a minimum of \$100,000 per year on exploration work.

Additional reporting initiatives, such as annual environmental reports, also come with significant costs. One Canadian major advises that it spends some CAN\$800,000 per year to produce the group sustainable development report.

At a time when profitability is low for many of the majors and the equity market for the juniors has all but disappeared, there is little appetite (and in many cases ability) to take on the cost of providing more information to more stakeholders. Given the absolute need for a corporation to meet the regulatory requirements to stay in business, this responsibility is exercised first and other calls for information are handled in accordance with corporate policy, priorities and operational necessities. Providing information to shareholders is

considered important as is communicating with employees and industry colleagues. Providing information to local communities and other stakeholders is increasingly recognized as being important, but in practice continues to receive third priority levels of support and funding in many companies.

8 Trends In Best Practice

Among the established initiatives in industry best practice, the following appear to be most relevant to the issue of access to information.

- 1. **Multi-Parameter Reporting.** Described as Triple-Bottom-Line and Sustainability reporting, this approach attempts to describe the company's economic, environmental and social performance. Reports identify corporate policies, goals and progress measured against specific indicators. Most companies report on these areas separately and as yet no consensus has arisen on how to integrate performance characteristics into a true measure of sustainability. Problems exist with what is to be measured, how it is measured, reliability of the measurements, and the materiality of the information presented in the report. This is particularly true of reporting on social aspects where corporate and community perceptions of what is important and should be reported may be quite different.
- 2. Independent Verification of Environmental Reports. As indicated above, there are as yet unresolved problems in measurement and verification for reports other than financial. In an attempt to overcome this a number of leading companies (Placer Dome for example) are experimenting with a process of independent verification of their environmental reports. These audit have involved external consultants and also environmental non-governmental organizations, the latter having the potential to provide the independence thought necessary to give the reports a high level of credibility.
- 3. **Continuous Community Consultation.** A number of companies have adopted a policy and practice of continuous community consultation, from the first phase of exploration through to mine closure and beyond. The intention is to build a strong relationship with the community. As part of the process, the company adopts an open and transparent position on project related information, fully disclosing all aspects of the operation to ensure that the community understands what is going on and that there are no surprises. The approach is still relatively new and much has still to be learnt. Already apparent is that there is a profound need for the company to provide significant education and capacity building to enable the community to participate fully. Indigenous and rural communities are particularly vulnerable because they lack cultural contact with modern business practice and an education in science and technology sufficient to understand the activities of exploration and mining. Nevertheless, this approach has been well received and appears to be an essential part of bridging the information gap between company and community.
- 4. Community Involvement in Environmental Management and Community Development. A trend begun in Canada and Australia that is now moving successfully into Latin America, this approach to communications brings the

community inside the information envelope on environmental and social issues around a mining operation, achieving a very high level of transparency. A community based environmental and/or social – development monitoring group is formed which has access to and, preferably, participates in environmental sampling, review of results and in making recommendations to improve measurement and management systems. A similar group can also monitor or make recommendations for ways in which a mine may assist community development and the creation of social capital. Examples of these types of community-company collaboration include the northern Saskatchewan program of Cameco (Canada) and the community environmental group created around San Marcos by Antamina (Peru).

- 5. **Transparency of Feasibility Studies.** The EIA process is rapidly becoming substantially transparent in all jurisdictions while the accompanying feasibility study remains largely company confidential. There are reasons to think this should change. Companies are under increasing pressure to ensure that local companies benefit from resource development and are expected to contribute from their share of revenues. Disclosure of the distribution of rents, as established by the feasibility study, can bring these pressures under control as shown by the example of Diavik (Canada).
- 6. **Open Book Reporting.** Other forms of communication still searching for transparency include HS&E reporting, closure and reclamation work reporting, and continuous reporting of not only positive aspects of a mine or project, but also negative developments as well. A few large firms have started to use this "open book" reporting of incidents policy to great success in creating corporate legitimacy.
- 7. **Making the "business case" for best practices in information disclosure.** While many large companies have already integrated the argument for open communications into their programs and policies, relatively few intermediate or small firms have followed this lead. According to the industry members themselves, there are three ways mining firms can be convinced to become better at information disclosure, especially in patterns amenable to the interests of "non-traditional" stakeholders.
 - Firms can claim to have "seen the light", with communication as an ethical responsibility;
 - Firms can be forced to change information disclosure patterns through regulatory or self-regulatory means; or
 - Firms can become convinced that "best practice" communications patterns create "value added". This final reason is the only one that is truly sustainable over time. For example, TVI Pacific, a Canadian junior, has attempted to engage an external stakeholder, the Canadian International Development Agency (CIDA), as a facilitating intermediary and joint venture partner with locals in the Phillippines. Their goal: to create a project environment where the four main groups – government, corporation, locals, and NGO's – can work together on community issues.

9 Discussion

From our examination of the behavior of the industry it is possible to discern some very persistent features.

- The flow of information, in terms of direction, character and timing, is driven primarily by the regulatory requirements placed on the industry. Taken collectively, the industry releases information in compliance mode rather than as an active engagement strategy with all its different stakeholders.
- In regards to information generated at the core corporate/head office level, it can generally be stated that communication *flows* to priority stakeholders, and *trickles* to secondary or tertiary actors. Moreover the industry, as a whole, is compliance driven, focusing on the need to meet regulatory requirements when it comes to providing access to information. This limits access to information for most interested parties that do not have regulatory powers, creating "de facto" internal and external stakeholders in the information game.
- It is also apparent that all mining companies, junior and senior, are comfortable only in providing information on things that have already happened, of reporting after the event. They are much less comfortable issuing information in real time and positively reluctant to talk about what will happen. The reasons appear to be largely cultural and relate to need to be in control of any given situation⁵. Information is power and the companies would prefer not to have to deal with awkward questions or be challenged on their activities. The junior companies in particular are nervous that information may be used against them.

The essential audiences differ slightly for junior and senior mining companies at the head office level. Small firms emphasize almost solely their relations with financial regulators (stock market and securities regulators) and their shareholders/potential shareholders. Larger companies, while still focusing on their shareholders as a key audience, have to accommodate a wider group of stakeholders because of the impact, scale and visibility of their operations. These producing firms also focus on project regulations and regulators (environment, health and safety, among others) and external stakeholders who demand transparent accounting of the activities at any given mine-site. The latter group of firms takes both head office and project level disclosure responsibilities on with equal merit. The junior sector argues that within the current regulatory and fiscal environments, it cannot do the same.

With all these limitations, real or perceived though they may be, for many stakeholders - and particularly for communities at exploration and mine sites - the corporate head office is seldom a satisfactory source of information.

Having looked at the two main types of communication between mining companies and the outside world, perhaps the most pertinent question would be: why do junior mining

⁵ The industry members have been trained by regulators not to release so-called "forward looking" communications on their operations. Is it surprising then, that their non-regulated communications follow a similar pattern?

companies have different attitudes toward information release in general from large mining companies?

First, a summary in which we will make some sweeping generalizations about companies to which there are, we acknowledge, exceptions.

Current attitudes among junior companies toward different information pathways and requirements can be summarized as follows:

- **Informal interfirm** communications are regarded as a key pipeline of information;
- Formal regulatory communications are considered a wrongheaded, heavy burden;
- Formal and informal investing public/shareholder communications are prioritized as a necessity;
- Public/Interest Group communications are (usually) avoided if at all possible; and
- Local (project based) communications are a chore that has to be done.

Current attitudes among senior companies toward different information pathways and requirements can be summarized as follows:

- **Informal interfirm** communications are regarded as a key pipeline of information;
- Formal regulatory communications are considered a distraction, but not a fatal one;
- Formal and informal investing public/shareholder communications are prioritized as a necessity;
- **Public/Interest Group** communications are compartmentalized as a specific obligation; and
- Local (project/mine based) communications are a part of creating long-term project stability.

Intermediate-sized firms generally fit in between the limited flexibility of the juniors, and the highly compartmentalized but more open communication strategies of seniors.

Now an analysis. It has already been shown that small firms feel increasingly burdened by financial, administrative, and project based regulations in their work practices. This explains some of their reluctance to get involved with local communities – a simple lack of time, money and energy. There are also the realities of low expectation of success, which is expressed as

we don't really have much to say to them until we know we have found enough tons to make a mine.

At the same time, however, it should be realized that neither the corporate culture, nor the people who populate the junior companies are adept at communicating with people outside of their world. As one geologist put it:

Geologists are good at communicating inside their own sphere of activity, but put them in front of a crowd of city folk, and they train wreck on you. We have a real hard time with making the connection. We are good at "preaching to the converted", but have a very hard time stepping outside to say, this is why this is important. It is not something you can teach in school, it is the nature of people, the kind of people that gravitate to jobs that stick you in the bush for long periods of time by yourself.

Another industry insider put the concerns about communication with external stakeholders as a corporate priority more succinctly, stating

for junior issuers, the primary sustainability issue is to sustain **themselves**. Juniors and seniors have totally different mindsets. Juniors see sustainability as a public relations exercise on the behalf of the senior companies.

Seniors (and to a lesser degree intermediates), on the other hand, have to prioritize communications at the project level because of a different set of risks. Companies involved in actually extracting minerals from the ground have always been beholden to government regulations over their activities. In recent years, seniors have also recognized the need to have the support of local communities because they are involved in the project area over the long-term, often 10-50 years in the case of a successful mine. They must establish a solid pathway of communication with locals. Increasingly, miners are finding that they have to answer to increasingly vocal elements of civil society as well, and this has provoked the use of third parties to legitimize and make transparent the actions of the company:

You avoid conflict by aligning interests of the local population with the interests of the company. That is an art form. The traditional approach of a mining company has been to throw money at a problem, and that is not always the best way to go. It has more to do with local respect and focusing on their needs. For example, we were doing water quality sampling in a project and the local population didn't think we were doing the testing properly; so we contracted the testing out to them. Everyone appreciated that solution.

10 Final Comments

This study has shown that information disclosure patterns are of two main types: core corporate/head office reporting and project-based reporting. These dual requirements not only take up a great deal of corporate time and effort, but there are often fundamental disconnects between their means, goals and priorities. Buzzwords like openness, transparency and creating legitimacy with communities lack relevance in a sector that feels over-burdened by regulatory requirements and whose shareholders emphasize only the "bottom line".

In the movement toward sustainability, the ability of mining companies not only to *claim*, but also to *prove*, that they have acted in a sustainable fashion will require different reportage types, methods and priorities. The major aspects of sustainability will be how individual projects are handled, and success will be measured on environmental and social parameters, in addition to existing economic parameters. It may take some time before reporting on these "soft" issues becomes standardized, as currently quantification (especially in the social realm) is poorly developed. Nonetheless, some form of standardization will be necessary as

well as auditing or verification to provide the transparency in reporting the public and interest groups demand.

Problem areas that need to be addressed relating to corporate disclosure patterns in mining include:

• The fact that for the most important (in the industry's consideration) stakeholders, the corporation's shareholders and the investing public, sustainability other than sustaining the profitability of the corporation is not a central issue. This is particularly true of the numerous junior companies, as one industry inside said,

Shareholders are not interested in sustainability. If sustainability were an issue, we will worry about it when we start producing, when we become an "adult" company, as *it were*.

- For the companies, the onerous and potentially conflicting ways in which financial regulators have attempted to meet their dual mandates of protecting shareholders and maintaining efficient and thriving capital markets. The emphasis on mining companies to provide the voluminous and sometimes contradictory information needs of all its stakeholders, while still maintaining its financial imperative, is currently debilitating both requirements. The argument made by many in the mining industry is that the economic leg of the "sustainability stool" is the weakest (the others being environment and social) and cannot continue to function as such.
- Corporate culture, perceptions of and relations with "external" stakeholders, and administrative incapacity all limit the ability of many companies to communicate effectively with certain stakeholder groups. Capacity building to overcome these deficiencies is clearly essential.

10.1 Key Questions for the Experts Meeting

- Are the current financial regulatory structures governing mining effective ways of achieving the stated goals of those organizations: to reduce risks to investors while maintaining efficient markets?
- Additionally, do current financial regulatory structures create a financial impetus that actually limits the ability of (especially small) firms to proactively engage *other* stakeholders in the field?
- How can corporate communications be standardized across national boundaries, a virtual necessity in a globalizing economy?
- What mechanisms of disclosure (what firms say, who they talk to, when they talk and how information is distributed) need to be reformulated to better foster communications with stakeholders?

References

Australian Institute of Mining and Metallurgy (2001). VALMIN Code. Http://www.ausimin.com.au/ Codes/valmin/valcode2.asp#d22.

British Columbia Securities Commission (2001). Annual Report: 2000-2001. Vancouver: British Columbia Securities Commission.

KPMG International (2001). Mining: a Survey of Global Reporting Trends. Toronto: KPMG International.

Leon, Camilo (2001). Guie de Relaciones Comunitaries. Lima, Peru: Ministry of Energy and Mines.

Lemieux, A. (2000). Canadian Suppliers of Mining Goods and Services. Ottawa: Minister of Supply and Services.

MacDonald, A. (2000). Risky Business: the Movement of Vancouver-based Mining Firms to Latin America. MA Thesis: Department of Geography, Simon Fraser University.

NAPEGG (1997). Reporting of Diamond Exploration Results, Identified Mineral Resources and Ore Reserves. Yellowknife: The Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories.

National Mining Association (2001). Untitled Document. Http://www.nma.org/ RTK%20Main.html.

Pasminco Limited (1999). Working with Indigenous Communities - Pasminco's Approach -1999-2002. Melbourne: Pasminco Limited.

Rendu, J-M. (2001). International Aspects of Resource and Reserve Reporting Standards. AUSIMM website!

Steele, John (2001). Presentation to Canadian Mines Ministers Conference.

Thomson, I. & S. Joyce (1997). "Mineral exploration and the challenge of community relations". Prospectors & Developers Association of Canada Communique. Toronto: PDAC.