



# MiningWatch Canada

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## Mines Alerte

### *Mining Investors*

#### **Understanding the legal structure of a mining company and identifying its management, shareholders and relationship with the financial markets**

Communities dealing with the impact from mining activities (whether at the claim-staking, exploration, development, operating, closure, or restoration/rehabilitation stage) find themselves confronted by a legal entity they may not understand, making demands that are contrary to the desires of the community, and giving reasons for its behaviour that they do not know how to counteract.

This Resource is an attempt to understand the nature of this legal entity – what drives it and maintains it, where its strengths and vulnerabilities lie – and to provide some tools to persuade the entity to act in a manner that sees the best interests of the community as part of its self-interest.

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Any remaining errors or omissions are all mine.

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## **Introduction to this resource**

Communities dealing with the impact from mining activities (whether at the claim-staking, exploration, development, operating, closure, or restoration/rehabilitation stage) find themselves confronted by a legal entity they may not understand, making demands that are contrary to the desires of the community, and giving reasons for its behaviour that they do not know how to counteract.

This Resource is an attempt to understand the nature of this legal entity – what drives it and maintains it, where its strengths and vulnerabilities lie – and to provide some tools to persuade the entity to act in a manner that sees the best interests of the community as part of its self-interest.

I have been asked to develop this Resource by activists who need more information about the mining companies they are facing. As I am pulling this together in late 2007, I am very grateful for work that has been done previously by a number of organizations in Europe, the United States and Canada. There is a body of literature on the Internet and in print that provides help to activists undertaking corporate research and planning campaigns in financial markets. Many of these sites are listed in the Resources section of this paper.

I have leaned heavily on two works: *Follow the Mining Money* published by the Western Mining Activist Network (2000 and now out of print), and the *Campaigners' Guide to Financial Markets*, published by the Corner House in the United Kingdom (early 2000s – no date provided).

That said, there is no up-to-date resource that advises Canadian communities and activists about the culture of mining companies and the structure of mining finance in plain English. There have been many significant changes in the mining world, and – correspondingly – in the world of corporate research over the past five years. And there are particular characteristics of Canadian investment and mining which are not captured in general works on corporate analysis or in resources from other countries.

### ***Objectives of the resource***

- 1) to provide mining activists with some of the tools they need to understand the corporate culture and financial structure of the mining company they are dealing with;
- 2) to provide some rudimentary tools and an analysis of the mining investment industry;
- 3) to provide some guidelines and resources for using this information to strengthen community-based efforts to ensure that any mining activities affecting the community are consistent with the goals and desires of the community.

This Resource does not provide an assessment of the value of different types of campaigns directed toward a mining company's financial base and legal structure such as lobbying shareholders, directors, or management, shareholder resolutions, alerting securities commissions of disclosure deficiencies, and diverting investment (through educating potential investors). It is a good idea to talk with experienced activists before any of these are undertaken. A partial list of such organizations is provided in the Resources Section.

The most thorough analysis of financial strategies is provided by the Cornerhouse *Campaigners' Guide*, <http://www.thecornerhouse.org.uk/pdf/document/camguide.pdf>. The reader is strongly encouraged to read it before embarking on a campaign.

## Understanding how mining companies are structured (in Canada)

### *Corporate persons*

Mining companies generally are *corporations*. A corporation is a separate legal entity distinct from its management and shareholders, created by a corporate statute under the laws of Canada or a province or territory. The corporate statute has specific rules about a corporation's rights, the governance of the corporation, and the responsibility of those that govern the corporation (generally the board of directors and officers) to the corporation and its shareholders and, in some statutes, other stakeholders.

There can be considerable differences among the corporate statutes in different jurisdictions, but in Canada most provincial and territorial corporate statutes generally follow the lead given by the federal *Canada Business Corporations Act* (CBCA). Industry Canada publishes an online guide to organizing a corporation, which can be found at [http://strategis.ic.gc.ca/epic/site/cd-dgc.nsf/en/h\\_cs01914e.html](http://strategis.ic.gc.ca/epic/site/cd-dgc.nsf/en/h_cs01914e.html).

In general, the shareholders of a corporation elect the board of directors. The board of directors is responsible for supervising the management and operation of the corporation and the officers are responsible for the day-to-day management of the corporation (hence officers are frequently referred to as *management*). The election will usually take place by *proxy*, that is, shareholders assign their votes to *proxy-holders* – other shareholders – who cast the votes for them at the company's Annual Meeting.

The CBCA and most corporate statutes in Canada require the board of directors and officers to act in the best interests of the corporation. Consequently, it has been held by Canadian courts that this duty permits the board and management to consider interests other than the shareholders and profit maximization. This is in contrast to many US statutes which require the Board to act in the best interests of the shareholders. However, most corporate actors in Canada believe the law to be the same as in the US – that the duty of the corporation and its board of directors and shareholders is to maximize profit for shareholders and act accordingly.

Corporations are considered in law to be a separate “person” or legal entity: they enjoy the same rights as people (“natural persons” in corporate statute jargon). However, corporations do not have a conscience, and their performance is entirely driven by their financial performance – their bottom line. Issues like social, cultural and environmental performance will only matter if, and to the extent that, they affect the finances of the company. This lack of conscience, combined with the legal fiction that a corporation is separate and distinct from its shareholders, directors, and officers, and that such individuals may not be responsible for actions that are considered to be actions of the corporation and not theirs as individuals, has been recognized to be a problem.

There have been changes in many laws creating personal civil and criminal liability for directors and officers (but rarely shareholders) for actions of the corporation for which they are individually and – in some circumstances – collectively responsible. An example of these changes is the “Westray Bill”, which was introduced in 2004 to deal with this liability after a horrific 1992 explosion at the Westray coal mine in Nova Scotia which killed 26 miners. While a provincial government inquiry found negligence on the part of company directors and managers, the criminal cases fell apart. The amendments to the Criminal Code expanded the duty of care in occupational health and safety to directors, officers, and anyone associated with directing the work of others, and made them liable to criminal prosecution.

There is also an “oppression remedy” which allows complainants the right to bring an action against a corporation under Section 241(2)(c) of the Canadian Business Corporations Act. Many provinces, like

Ontario, also have an Oppression Remedy. The Court can grant a remedy if the powers of the directors of a corporation or its affiliates have been exercised in a manner that is oppressive or unfairly prejudicial, or disregards the interests of any security holder, creditor, director or officer of the company. It has great scope in remedies, including cash damages, appointing a receiver, dissolving the corporation, or amending the charter documents of the corporation. It allows the court to look at personal relationships between companies as well as legal entities, including “self-dealing”. The Department of Indian and Northern Affairs used it in 2007 to try to get a successor company (with related directors) to clean up the Ketzia mine near Ross River, Yukon.

For an excellent critical film resource on the nature of corporations and corporate culture, see *The Corporation*. Information about this film, purchase/rentals and guides to using it can be obtained from [www.thecorporation.com](http://www.thecorporation.com).

The fact that a corporation may be incorporated in Canada does not mean it is carrying on business in Canada. Similarly, a corporation incorporated in a jurisdiction outside of Canada may carry on business in Canada, (although it may have to comply with requirements to register as a corporation doing business in Canada). However, in Canada, there traditionally were rules requiring a majority of the directors to be Canadian residents, but these requirements have recently been substantially reduced. Today, under the CBCA, only 25% of the directors must be resident Canadians. Ontario (since August 2007), Manitoba, Alberta and Newfoundland all require 25% of directors to be resident Canadians, but the Yukon, BC, New Brunswick, Nova Scotia, Prince Edward Island and Quebec have no residency requirements whatsoever. Saskatchewan is the only province that still requires that a majority of the directors be resident Canadians.

The Yukon has the most permissive Corporations Act in Canada. It allows meetings of directors to take place anywhere in the world (like Hong Kong), and requires no filing of financial statements from “private” companies. The permissiveness of Yukon law is one of the reasons that Ivanhoe Mines could incorporate its Burma subsidiary (Monywa) in the Yukon.

Regardless of where a corporation is incorporated, if it is doing business in Canada then it will be subject to Canadian laws, including laws governing the sale of securities to Canadian residents, environmental laws, and other laws of general application. However, it should be noted, that if its operations are in another country, Canadian law will not apply to those operations.

However, foreign corporations may also have additional rights under treaties such as the North American Free Trade Agreement (NAFTA). Chapter 11 of NAFTA protects US companies from an “expropriation of their value” caused by a change of law or regulation. Glamis Gold (a US-based company incorporated in Canada, and since bought out by Goldcorp) used this section to sue the State of California for \$80 million after the State introduced a law requiring the backfilling of open pit gold mines on territory sacred to indigenous people. Glamis said that this made its Imperial Gold Mine, which would have damaged the sacred lands of the Quechan people, uneconomic, and that the law “expropriated the value” of the mine.<sup>1</sup>

### *Subsidiaries*

Corporations often form and own other corporations, which are called “*subsidiaries*” (if they own over 50% of the voting shares) or affiliates or related companies (if they own a lesser portion). These subsidiary companies are considered to be corporate persons separate and distinct from the parent

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<sup>1</sup> For more information, see *Goldcorp Analysis* at [http://www.miningwatch.ca/updir/Goldcorp\\_Analysis\\_Sept\\_2007.pdf](http://www.miningwatch.ca/updir/Goldcorp_Analysis_Sept_2007.pdf)

company. This is important information to know when dealing with mining companies. Most mining companies incorporate a separate entity to manage each mine. Unless that separate company's agreements are guaranteed by the parent company, the only assets the subsidiary company owns will be the mine and its infrastructure. There can be an endless chain of subsidiaries, affiliates and related companies, incorporated in many different jurisdictions. For an example of what a company structure may look like, go to Appendix 1 of *Goldcorp Analysis* (available on the MiningWatch web site). In the Goldcorp case, the company has a number of *holding companies*, set up as tax shelters and administrative units in the Barbados, the Cayman Islands and the British Virgin Islands.

Some mining company subsidiaries, affiliates and related companies will be *joint ventures* with other mining companies, with some agreement to share profit or loss. Joint ventures can be legally structured as a partnership, a private company or a public company (see below). The terms of the joint venture are spelled out in an agreement between the two (or more) companies. There are Aboriginal governments and corporations that enter into joint ventures with mining companies on their territories.

From the perspective of how they raise money, there are two basic kinds of mining companies: private companies and public companies.

A *private company* does not seek to sell shares on financial markets or to the public generally. It raises its money from "private" sources (which under securities laws includes founders, family, and sophisticated investors such as mutual funds, financial institutions, pension funds, and wealthy individuals). An example of a private mining company is DeBeers Canada ([www.debeerscanada.com](http://www.debeerscanada.com)), which owns the Victor Diamond Mine in northern Ontario.

A *public company* sells shares to the public via stock exchanges and similar public financial markets. People who invest in shares of the company (whether private or public) are called *shareholders*. Shareholders buy parts of the company, called *shares*, and are said to have *equity* in the company (more about this below). Although some small prospecting/exploration companies are private companies, most mining companies are *public companies*, or subsidiaries of public companies.

People who lend money to the company in the form of debt are called *creditors*. Creditors rank ahead of shareholders should the company go bankrupt. Consequently, although creditors are in a more secure position than shareholders, their return is generally limited to a set level of interest, while shareholders' return is limited only by the profitability of the company.

Shareholders' legal rights are defined in the corporate statute under which the company is incorporated. An example of a shareholders' rights sections of a corporate statute can be found in Appendix 2. Please note that different jurisdictions will have different rules.

Corporations need three basic things to operate: they need an activity that creates wealth; they need money to operate and buy equipment (capital); and they need people to do the work (labour).

### ***The securities 'industry'***

Mining is the most basic of wealth creation activities – it removes minerals and crystals from the earth – which have no value in currency – and transforms them into mineral concentrates and gems which can be sold for dollars, and create revenues for the company.

Opening a mine is a very expensive proposition. The huge earth-moving equipment can cost millions of dollars each. When mines are in remote areas, all the infrastructure has to be transported to the site, so a



mine requires roads, power lines, diesel tank farms, a mill (to crush the ore), a camp, an explosives facility, pipelines, sewer lines, a tailings pond and trucks, bulldozers and mechanical shovels. Underground mines are more costly than open pits. Operating the mine will require electrical power, water lines and pumps, transportation for equipment, concentrates, labour and materials, catering services, administration, investor services, and banking. Mines also purchase services from consultants: environmental consultants, government relations, lawyers, marketing, sales, etc.

Because mining requires a lot of money to open and operate, it also requires a lot of investment.

### *Shares*

Shares form the basic raw material of mining industry financial markets. Mining companies issue literally millions of shares. The value of these shares goes up and down depending on a number of factors: the price they can sell their metals for, the level of speculation in the market, the number of shares they issue, the company's reputation. Some companies have *penny stock*: their shares are worth very little (for example 15 cents a share); others (and the same company at other times) may have shares worth \$50 or more. Speculating on share price is a key feature of the mining stock market.

You can check out the stock prices of companies listed on the stock exchange on a number of different web sites (see *Resource* section), as well as in most daily Canadian newspapers.

Most important owners of shares are investment institutions, pension funds, life insurance companies, and other financial institutions which buy them for long term investment purposes. Many of these institutions are re-investing money provided to them by individuals, for example, pension contributions and bank deposits. However, individual investors also make up a sizable portion of shareholders (although this portion is larger in the United States than Canada).

### *Structure of the securities industry*

The instruments used for investing are called *securities*, and the industry that buys and sells securities is called the *securities industry*. The securities industry is made up of integrated, institutional, and retail firms:

- *Integrated firms* offer products and services that cover all aspects of the industry, including both the institutional and retail markets.
- *Institutional firms* provide services exclusively to pension funds, insurance companies, mutual fund organizations, banks and trust companies.
- *Retail firms* include full-service firms and discount brokers and offer a wide range of products and services for investors.

The securities industry is large and powerful in Canada, and is now dominated by the banks. At the end of 2001, there were 198 securities firms operating in Canada. The seven largest integrated securities firms, which include those owned by the six major domestic banks and one major U.S. dealer, accounted for 71 per cent of total industry revenues. Retail firms accounted for 20 per cent of revenues, while foreign and domestic institutional firms accounted for 9 per cent.

The mining industry and the securities industry in Canada are deeply dependent on one another. In 2006, sixty percent of the world's public mining companies were listed on the Toronto Stock Exchange (TSX) or the TSX Venture Exchange (TSX-V). Forty percent of the money for mine finance in the world was raised on Canadian exchanges, and more than eighty-eight percent of the world's mining deals were done on one of these two exchanges.

The CEO of the TSX Group told Canada's Mines Ministers in 2006: "We are, simply put, the best market in the world for financing the discovery and development of mines anywhere and everywhere in the world. That's a role in which small companies excel. ...But, equally, we also are the best market for finding partners, for acquiring and being acquired, for merging and creating alliances, all essential for growth."<sup>2</sup>

Securities industry revenue is made up of commission revenues (including mutual fund transactions), investment banking revenues (underwriting fees and mergers and acquisitions), fixed-income and equity trading revenues, net interest revenues, and other revenues.

The two main products traded in the securities industry are fixed-income securities and equities. *Fixed-income products*, which include bonds, asset-backed securities, and money market instruments, are traded in dealer markets. *Equity products*, which include common and preferred shares, are mostly traded on stock exchanges.

#### *The regulation of the Canadian securities industry*

Regulation is carried out by the provinces and territories, each of which has its own securities regulator. The 13 provincial and territorial regulators collaborate through the Canadian Securities Administrators, whose goal is to harmonize and streamline securities regulation in Canada through enhanced inter-provincial cooperation.

The federal government (at the urging of provinces such as Ontario) has long been considering assuming the lead role in regulating the securities industry under its constitutional power to regulate interprovincial trade, etc. This would result in the establishment of a single national securities regulator as exists in the United States (although each state also has a securities regulator responsible for issuers operating in the state that are not listed on a national stock exchange).

As a result of lobbying from financial institutions, the provincial securities regulators delegate some authority to *self-regulatory organizations* (SROs) such as the stock exchanges, which have a long history of 'regulating' and supervising market intermediation in Canada. The well-recognized SROs are the TSX, the Montreal Exchange (ME) in Québec, Market Regulation Services Inc., which is owned jointly by the TSX and the Investment Dealers Association of Canada (IDA), and the IDA itself outside Québec. The IDA monitors the activities of investment dealers across the country in terms of their capital adequacy and business conduct. The SROs are currently undergoing some restructuring.

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<sup>2</sup> Remarks from Richard Nesbitt, CEO, TSX Group, Federal-Provincial Mines Ministers, Whitehorse, Yukon, August 29, 2006

### ***How the financial markets work***

*“Financial markets are where those who want money link up with those who have money and who are prepared to make it available – for a future profit.”<sup>3</sup>*

Companies buy and sell their shares through the financial markets. In Canada, the primary financial market is the Toronto Stock Exchange (TSX), along with the TSX Venture Exchange, (responsible for junior equity, and owned by the TSX), and the Montreal Exchange (ME) (focused on derivatives such as stock index options, bond futures, and stock options, an area the TSX agreed with the ME to stay out of, although this agreement expires soon). These stock exchanges have themselves in recent years also become public companies.

Mining campaigners might consider intervening in these markets in order to persuade lenders and investors to put their money in one company rather than another or to attach conditions to their investments.

Stock brokers and investment banks, through their securities departments, trade on a short-term basis, helping to establish the price of the shares. Their analysts research companies and provide commentary. They also sponsor companies when shares are first listed, market companies to investors, and buy shares with the intention of selling them.

Most mining companies are “*publicly listed*”, meaning their shares can be bought and sold by the general public. The price of shares changes constantly. In the short term, the price depends on supply and demand for the shares. Because of this constantly changing price for shares, many investors are more interested in buying low and selling high in the short-term than they are in the long-term performance of a company. A company can raise extra finance by issuing more shares, and it can also buy back shares from investors.

Most mining company shares are held by large financial institutions, including mutual funds, pension funds, bank investment houses, and insurance companies.

Public companies also raise money by *borrowing* from banks or issuing bonds – a tradeable form of loan, whereby the company agrees to give the buyer a certain amount of interest every year and then repays the bond after a specified number of years.

### *Forms of stock instruments*

The equity in a public company is divided between common shares, preferred shares, options, and warrants:

- a. *Common shares*: the basic shares of company equity held by investors. Shareholders have a vote in the election of the Board of Directors and carry the profit/loss risk. The value of the common shares is offset by the accumulated deficit and other liabilities, but shareholders are entitled to all that remains (if anything) after these are paid.
- b. *Preferred shares*: these are shares that are privileged over common shares in terms of the payment of dividends and return on capital. They generally are non-voting and their return is limited to a fixed dividend.

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<sup>3</sup> Cornerhouse. Page 15

- c. *Options*: a company may grant options to directors and officers totalling up to 10% of the number of common shares, and may grant more options to others, such as agents. An option is a contract that gives the buyer the right, but not the obligation, to buy or sell equity (shares) on or before a certain date for a specified price. If, for example, the price of a share skyrockets, the person who holds the option can buy the share for the option price and sell it for the higher price. Company stock option plans and shareholder rights plans limit the amount or percentage of options that can be granted to directors and officers. The shares of junior mining companies are often optioned by larger companies, which may expect a certain amount of exploration work to be carried out in return.
- d. *Warrants*: Warrants are issued by the company and each whole warrant gives the holder the right, but not the obligation, to buy a share at a certain price until a specified expiry date.

Definitions and further information about different kinds of securities can be found on the Ontario Securities Commission web site.<sup>4</sup>

There are a plethora of other methods of gambling in shares that attract investors. In the mining market, the most significant are *derivatives* – contracts that gamble on the future prices of assets like shares, commodities and bonds. The current price of an asset is determined by the market demand for and supply of the asset; but the future price of an asset is a gamble. A week or a month in the future, the price may increase, decrease, or remain the same. Derivatives buyers and sellers hedge their bets against this uncertainty about future price by making a contract for future trading at a specified price. The contract – a financial instrument – is called a derivative.<sup>5</sup>

*Options* – described above – are a form of derivative contract.

*Hedging* is a form of derivative contract that sets the sale price of a commodity (like gold or uranium) based on an anticipated future selling price. If the price goes up more than expected the seller loses; if it goes down, the seller wins.

#### *Investment dealers and brokers*

When shares are offered on the financial markets, they are offered through investment dealers, also called brokers. There are basically two kinds of deals:

*The agency deal* – the broker acts only as the agent for the share offering, and charges a fee and a commission on sales. Shares that are unsold at the limitation date of the offering return to the mining company that issued the shares

*The underwritten deal* – the dealers effectively agree to buy the shares being offered and re-sell them to the public. There may be a number of conditions attached to the deal. If there are shares that remain unsold at the end of the offering period, then the dealer retains ownership of the shares (and of the company).

Major offerings of shares are described in public documents that have to be posted on the System for Electronic Document Analysis and Retrieval (SEDAR) site ([www.sedar.com](http://www.sedar.com)). The first issuance of shares for a company is called an *Initial Public Offering* or *IPO*. Except for established mining companies, most share offerings will be agency deals of one form or another. The fees charged by the

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<sup>4</sup> [http://www.osc.gov.on.ca/Investor/Resources/res\\_characteristics-of-securities\\_en.pdf](http://www.osc.gov.on.ca/Investor/Resources/res_characteristics-of-securities_en.pdf)

<sup>5</sup> <http://canadianeconomy.gc.ca/english/economy/derivative.html>

brokers are described in the offering documents and can be seen with the company's public documents on SEDAR.

## **Finding out who owns a mining company: tracking investors**

### ***Researching ownership***

A great deal of information about company ownership can be found through company web sites, their filings with the Securities Commissions, and Google searches. Securities Commission filings in Canada are all posted to SEDAR. The most fruitful documents to research on the SEDAR web site are a company's Annual Information Form (AIF), Management Information Circular, Financial Reports (in particular the notes), its Management Discussion and Analysis, Prospectus (if filed), Share Offerings, and Technical Reports.

The AIF and Information Circular in particular will provide a company history, a list of directors and name any insider with share holdings over 10%.

If the company is registered in the US, it will be required to file an annual form 10-K (or equivalent) with the Securities and Exchange Commission, which is a public document. US securities rules generally require more disclosure than Canada's. To access SEC filings, visit [www.sec.gov/edgar](http://www.sec.gov/edgar) (see resource list for information on searching US SEC filings).

The *Cornerhouse* publication also provides some excellent tips on how to research the ownership of companies, on pages 129-135, 137, and 168-170.

### ***Finding the shareholders***

Under most corporate statutes, shareholders of a corporation are permitted to request a shareholders list or to inspect the shareholders list, if it is for a legitimate purpose (which is defined mainly in terms of what is best for the corporation and its shareholders as a whole). The Canada Business Corporations Act allows inspection of the list at the corporate head office or Annual Meeting. The BC Corporations Act requires the company to send it to any person who wants the list for a restricted set of purposes, most related to influencing shareholder decision-making. However, there are three practical problems:

1. Most shares are now held in nominee form (eg. *depository* and broker accounts) so you will not get the 'beneficial' shareholders' names, i.e. the actual owners.
2. The request must strictly comply with the requirements of the corporate statute (which sometimes requires a relatively high minimum shareholding).
3. There may be a financial cost.

An example of shareholders' rights from the Ontario Corporations Act can be found in Appendix 2.

Each jurisdiction has different rules about what has to be made available to the public. The term for this is *disclosure*.

As an example, in Ontario, the only persons who are required to disclose their investment in an Ontario public company (any company listed on the TSX or TSXV) are insiders (directors, officers and those who own over 10 per cent or, in certain limited circumstances during a take-over bid, over 5%). The

insider report they are required to file should disclose all shares, options, warrants, and any other security held. The Ontario Securities Act requires these reports to be updated within ten days of any change in their holdings. The system is electronic, and can be found at [www.sedi.ca](http://www.sedi.ca) (System for Electronic Disclosure by Insiders), maintained by the Ontario Securities Commission. The rules for disclosure are available on different securities commission web sites.

Information on whether mutual funds or other institutional investors own shares, etc., is a little harder to get.

If they are subject to US rules, investment managers doing more than \$100 million in business annually have to file a form 13-K, which is also public, and may disclose in company reports once they hold over 5 per cent of shares.

In Canada, there is a mutual fund section on [www.sedar.com](http://www.sedar.com). Many funds include a list of their investments in their annual reports, so you can look at these reports. Funds are usually long-term, passive investors, and may be buying on behalf of several underlying funds (eg. pension funds) so their investments tend not to change. (For this reason, they are in some circumstances exempt from having to report trades within ten days, even when they are over ten per cent, but are allowed to do periodic filings.)

The key mutual funds and other investors that own shares of the company may be found at [www.stockwatch.com](http://www.stockwatch.com) and at [www.targeted.com](http://www.targeted.com), but a subscription is required. Targeted Inc., the Canadian Institutional Holders Database, provides the most complete comprehensive and timely business intelligence data on listed companies, portfolio managers, and global institutional and insider ownership of securities. The current database consists of Canadian institutional holdings of over 40,000 listed securities. Targeted.com does not provide data for US holders.

### ***Public funding of mining projects***

There are three basic ways the Canadian public at large helps to finance mining company projects: direct investment (equity, loans, grants), infrastructure support (building hydro lines, and roads, providing free water, and permitting pollution without compensation), and through tax deals and subsidies.

#### *Direct investment*

Governments and public pension funds like the Canada Pension Plan and the Caisse de Depots et Placements in Quebec are key sources of mining company investment in Canada. The pension funds of public servants, and teachers are also major players.

For the international operations of Canadian mining companies, Export Development Canada, the Canadian International Development Agency, and the World Bank Group may be significant investors. Québec is the only province that makes equity investments in mining companies.

A number of trade agreements – both multilateral and bilateral – also provide deals for mining companies, reducing withholding taxes, allowing tax shelters of various kinds, or, as in the North American Free Trade Agreement, protecting companies against the toughening of environmental legislation in the partner country, by disallowing the “expropriation of value of the investment”.

This paper does not go into detail on how to research direct public funding. You can get more information from the Halifax Initiative ([www.halifaxinitiative.org](http://www.halifaxinitiative.org)) in Canada and the Bank Information Center ([www.bicusa.org](http://www.bicusa.org)) in the US. The Polaris Institute ([www.polarisinstitute.org](http://www.polarisinstitute.org)) follows trade agreements and undertakes corporate analysis on occasion.

The Harvard Business School Project finance portal ([www.hbs.edu/projfinportal](http://www.hbs.edu/projfinportal)) also tracks the public financing of a number of corporations.

### *Tax benefits and subsidies*

A detailed discussion of tax incentives and subsidies can be found in *Looking Beneath the Surface: Assessing the Value of Public Support to the Canadian Metal Mining Industry* (2001), which is available on the MiningWatch Canada web site.<sup>6</sup>

Because of the significance of tax issues in financing mining exploration, this Resource spends considerable time on exploration tax credits and “super flow through shares”. In looking at company balance sheets, it is important to recognize that most mining companies pay very little tax, even when their operation is apparently very profitable.

### *Infrastructure support*

Support from public funds for infrastructure is a critical part of mine financing. Analysis is specific to, and different for, each mining project, and requires careful digging through documents from different ministries in the jurisdiction affected: forestry permits, fish habitat, water permits, road construction, port and airport clean-ups and construction, railway construction and maintenance, rates for energy, water, and transportation. Most mining projects benefit from training of workers (and sometimes their relocation), paid for by governments. Closure and reclamation costs are usually underestimated or not declared at all. Often the company makes assumptions about infrastructure support that have not been cleared with governments, and certainly not with tax-payers. As an example, the Red Chris mine proposal in British Columbia is dependent on the British Columbia government providing a transmission line up Highway 37.

### ***A note on disclosure and “materiality”***

In Canada, where the securities industry is regulated at the provincial level, specific requirements call for the disclosure of information concerning a company’s social and environmental affairs in its published documents. The company is required to report “risk” to investors in its Annual Information Return and various share offerings. Generally, this is done in a very formulaic manner which should give anyone pause before placing their money in a company. The fact that people invest anyway indicates the kind of investors that are attracted to mineral exploration. For example, the Redcorp Preliminary Short Form Prospectus issued in May 2007, includes these words:

*“...The risk factors contained in the Annual Information Form... include but are not limited to risks associated with a history of net losses and financing risks, risks related to the operating hazards, risks related to fluctuating metal prices, share prices and currencies, risks relating to title to mineral properties, risks related to exploration and mining, risks related to estimates of mineral resources, risk of non-compliance with and*

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<sup>6</sup> <http://www.miningwatch.ca/updir/belowthesurface-eng.pdf>

*changes to applicable laws and regulations relating to the mining industry, risks associated with non-compliance with environmental and regulating requirements, risk of changes to environmental legislation, risks associated with the outcome of current legal matters, political risks with respect to operations, insurance risks, risks associated with dependence and key management personnel, the risk of conflicts of interest, risk related to the Company's limited operating history and competition from other mineral companies. Additional risks not currently known to the Company, or that the Company currently deems immaterial, may also impair the Company's operations."*

The fundamental criterion for reporting specific risks (as opposed to the formula in the above example) is *financial materiality*. Social and environmental information has to be reported to the extent that it is deemed to be financially material. In Ontario, the *Securities Act* requires the timely disclosure of information about any "material change" in the affairs of a company. As well, the TSX has established disclosure guidelines in line with the *Securities Act*, although its definition of "material information" is broader than "material change"; specifically, the TSX definition includes information concerning rumours and speculation that may also have a financial impact on a company.<sup>7</sup>

If you want a company to disclose to investors information about environmental, social or cultural impacts, then this means couching your concerns in terms of "material costs" or potential costs.

Robert Repetto writes:

*"In the securities laws of both the United States and Canada, the fundamental rule is that all material information must be promptly disclosed. In both countries, existing law requires disclosure in the Management Discussion & Analysis sections of financial reports of risks and uncertainties known to management that would be reasonably likely to cause future financial results and conditions to differ materially from those currently reported. In addition, there are specific requirements for the disclosure of material environmental information, including the current and future financial impacts of environmental regulations and environmental risk factors that might have a material effect on the enterprise."*<sup>8</sup>

An excellent set of ten case studies of mining disclosure undertaken by Repetto, and available at <http://www.foundationpartnership.org/pdf/mining.pdf>, looked at the requirements applicable to hard rock mining companies listed on U.S. or Canadian stock exchanges for financial disclosure of material environmental information. Financially material environmental events that occurred to ten mining companies in recent years were reviewed to explore to what extent the companies had complied with disclosure requirements. These events included "dam failures, increases in remediation liabilities, increased bonding requirements, and other environmentally related changes."<sup>9</sup>

In Canadian corporate reporting, the most common shortcomings in disclosure are found in the failure of the Management Discussion & Analysis section of company financial reports to disclose material risks and uncertainties known to management which were likely to result in material changes in financial conditions and results, for example, failure to report a moratorium on mining exploration

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<sup>7</sup> National Round Table on the Environment and the Economy (NRTEE). *Achieving a Balance: Four Challenges for Canada in the Next Decade*. 2000. <http://www.nrtee-trnee.ca/eng/publications/millennium-achieving-a-balance/index-millennium-achieving-a-balance-eng.htm>

<sup>8</sup> Repetto, Robert. *Silence is Golden, Leaden, and Copper: Disclosure of Material Environmental Information in the Hard Rock Mining Industry*. <http://www.foundationpartnership.org/pdf/mining.pdf>

<sup>9</sup> *ibid*



called by a First Nation, a new reclamation regulation, or a court case that will require the company to repeat an environmental assessment.

Complaints have been made by mining campaigners to Securities Commissions about lack of disclosure or about misrepresentation of material facts by mining companies, which have resulted in changes to what and how they report. There are a number of examples. MiningWatch Canada and DECOIN (in Ecuador) filed a report about the IPO filed by Ascendant Copper, saying that the company failed to disclose conflicts and violence provoked by its Ecuadorian project. MiningWatch Canada filed a report about bcMetals' failure to disclose information about an application in federal court that challenged the Red Chris mine's environmental assessment. Rivers Without Borders filed a complaint about Redcorp's reporting that drill holes were nine miles apart were part of the same mine project. In all three cases, the company was forced to correct their reporting to include the requested information. In no case did the complaint appear to have any impact on investors or securities regulators.

### **Canadian junior mining companies exploring in Canada: special considerations**

Many of the junior mining companies creating havoc in communities have no real expectation of developing a mine. "Instead they are inspired by market trends and taking advantage of the madness of crowds when faced with an effective market hype program that permits these companies to raise millions in equity from naïve (or blindly greedy) public investors to keep their exploration programs going."<sup>10</sup>

Their balance sheets often show nothing but operating losses, as the only cash they generate is from the shares they sell (which shows up in the assets-liabilities section of their financial statements).

The ability to raise money for exploration is enhanced by two federal programs: the Accelerated Capital Cost Allowance (ACCA) and the Super Flow Through Share Program. Mining exploration also enjoys a special incentive called "Canadian Exploration Expenses".

*Canadian Exploration Expenses (CEE)* are expenses incurred in Canada for the purpose of determining the existence, location, extent or quantity of a mineral resource, including prospecting, geo-chemical and geophysical surveys, drilling, trenching and preliminary sampling, removing overburden, sinking a mine shaft (pre-production development costs). They do not include costs for the purchase of mineral claims. Since 2007, they do include the costs of Environmental Assessment and Aboriginal consultation. Any portion not used in the year the expenditure was incurred can be carried forward indefinitely. This creates a pool of expenditures that can be transferred to subsidiaries or upon sale of the company. The pool of expenses becomes a "Tax Asset" on the company's balance sheet.

*The Accelerated Capital Cost Allowance.* The federal Income Tax Act allows a company to write off 100% of the costs for any "Class 41" (mining equipment) capital expenditures in one year provided the costs were incurred before the company goes into production. This is a huge tax saving to the mining industry, estimated by the Pembina Institute at over \$1.2 billion.<sup>11</sup>

*Super Flow Through Shares.* Companies are allowed to renounce or 'flow through' CEE expenses to shareholders so that the investor can use them as a tax loss. Believe it or not, some investors need tax losses to avoid paying income tax. Investors get a 100% tax deduction for the money they invested in

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<sup>10</sup> Paraphrase of a comment from a mining investment lawyer who regularly deals with junior companies.

<sup>11</sup> Green Budget 2008, *Preserving Minerals for the Future: Ending Counterproductive Support Programs*, Ottawa, available at [www.greenbudget.ca](http://www.greenbudget.ca).

the shares. In addition, the federal government gives a 15% tax credit to investors under the program. (This is what makes it “Super”.) Mining exploration is the only industrial sector to get this tax credit.

The super flow-through program was introduced in October 2000 as a temporary measure to help moderate the effect of a global downturn in mineral exploration in the 1990s. This tax credit is set to expire in March of 2008, and the industry is already lobbying to make it permanent.

There is also a federal 10% corporate tax credit to exploration companies for mineral exploration projects on previously undeveloped land.

Super flow-through shares, tax credits, and their provincial equivalents enrich speculative investors by reducing the after-tax cost of a \$1,000 investment in mineral exploration in Canada to as little as \$284 in Quebec and \$382 in BC. The Prospectors and Developers Association of Canada annually provides a leaflet that shows how these numbers have been calculated. See Appendix 5.

It is important to note that most provinces also offer flow through shares and tax incentives for mines in remote areas (eg. ten year tax holidays) in addition to the federal program. A study of these programs can be found in *Looking Beneath the Surface: Assessing the Value of Public Support to the Canadian Metal Mining Industry* (2001), which is available on the MiningWatch Canada web site.<sup>12</sup>

There has been a proliferation of limited partnerships of investment dealers who broker the relationship between individual investors who want the tax losses and companies that are willing to give up portions of their CEE tax pool in return for the investment. These dealers make anywhere from 20-40% in fees for the transactions, so they have their own interest in maintaining the program.

The combined effect of all this is a net upsurge in companies that want to create exploration costs and hype their claims, even when the mine may have no real chance of ever going ahead. The intention of these companies is to mine investors and the tax system, not the land. It must be noted, however, that exploration itself creates substantial environmental damage.

Some juniors may also be seeking compensation for mineral claims in planned protected areas. At present, British Columbia is the only province that has enshrined this right to compensation in law – “the BC Mining Rights Compensation Regulation” under the Mineral Tenure Act.

See Appendix 3 for more information on flow-through shares.

## **Estimating mineral potential: feasibility studies**

### ***NI 43-101***

In responding to proposed mining projects, it is important for those affected by them to be able to assess the mineral potential realistically. Investors also need to do this. Generally speaking, all exploration companies hype the value of their findings to the extent they are allowed to do it, in order to encourage investment. For affected communities it is important to determine if the company’s real intentions are to mine investors and the tax system, or to mine minerals in the ground.

In response to industry hype, securities regulators have developed a policy that describes the ways in which mineral potential must be described in public company documents. The policy is called *National*

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<sup>12</sup> <http://www.miningwatch.ca/updir/belowthesurface-eng.pdf>

*Instrument (NI) 43-101* or the *CIM Definition Standards*. NI 43-101 provides standards for the classification of mineral resource and mineral reserve estimates into various categories, based on rules developed by the Canadian Institute of Metallurgy (CIM). The *Definition Standards* can be found in Appendix 1.

The category to which a resource or reserve estimate is assigned depends on the level of confidence in the general geological information available about the mineral deposit; the quality and quantity of data available on the deposit; the level of detail of the technical and economic information which has been generated about the deposit, and the interpretation of the data and information. The NI 43-101 report may include a discussion of community and First Nations consultation, although this is unusual.

### ***Commodity price***

It is important to remember that mineral potential is closely tied to the price of the commodity and the extraction costs. The *commodity price* – the sale price of most minerals extracted in Canada and around the world – is set on the London Metals Exchange (LME), and is somewhat related to supply and demand for the mineral. Coal prices are set in April each year by major coal producers. Some commodities, like uranium, are also sold under supply contracts, with prices linked to the “spot” market price. Metal commodity prices are, like other products, vulnerable to speculative bubbles, which do not reflect real demand for a product. In 2007, uranium and gold prices are speculative, not tied to real demand. Future commodity prices used to predict mineral values over the long-term (especially for speculative commodities) are often completely out of whack with reality.

You can see predicted and past metal prices at <http://www.infomine.com/investment/metalprices/>. Excellent analysis and links for prices can be found on the University of British Columbia library site at <http://www.library.ubc.ca/scieng/mmatmark.htm>.

The estimates are to be verified by an “*independent qualified person*” or QP. In many cases we have looked at, the QP is not, in fact, independent, but is a geologist who is also an officer or director of the company, or a contractor. This conflict keeps the estimate of mineral potential from being “*NI 43-101 compliant*”.

### ***Complaints***

A complaint about resource hype will be taken seriously by the Securities Commissions and by most investors. In fact, investors have strong rights in law to sue:

*“If a prospectus contains a misrepresentation, a person who purchases a security offered by the prospectus (a) is deemed to have relied on the misrepresentation if it was a misrepresentation at the time of purchase, and (b) has a right of action for damages against*

- (i) the company*
- (ii) the underwriter*
- (iii) every director of the company at the time the prospectus was filed,*
- (iv) every person who signed the prospectus, and*
- (v) every person whose consent has been filed as prescribed.”<sup>13</sup>*

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<sup>13</sup> *NI 43-101 Standards of Disclosure for Mineral Projects*, Deb McCombe, P.Geol., Chief Mining Consultant, Ontario Securities Commission, Craig Waldie, P.Geol., Senior Geologist, Ontario Securities Commission, and Robert Holland, P.Geol. Chief Mining Advisor, BC Securities Commission. Toronto, March 2, 2007

As an example, Canarc had to issue the following in a news release on September 26, 2006:

*Since 2002, Canarc has made disclosures in certain news releases, shareholder updates, corporate presentations, website information, AIFs and MDAs [annual information forms and management's discussion and analysis] regarding a 1.3-million-ounce gold resource estimate for New Polaris. These disclosures were not in compliance with NI 43-101 because the estimate did not meet the definition of a historic resource, it was not disclosed according to NI 43-101 standards and it was not supported by a technical report. Canarc therefore retracts its previous statements regarding this resource estimate and restates the previous historic estimates that comply with the NI 43-101 definition of historic resources at the end of this news release.*

It is extremely difficult to find a geologist in Canada who is willing to criticize a resource estimate and put his/her name on it.

### ***Scoping and Feasibility Studies***

Companies that are serious about developing a project will undertake a scoping study (or pre-feasibility study) and then a feasibility study. The feasibility study is not usually public, but should be demanded by affected communities. These documents are directed at potential investors and banks, and will estimate all of the mine's costs and cash flow over time.

Excerpts from an example feasibility study are in Appendix 4; we will also be glad to supply examples upon request.

The feasibility study will provide an estimated *Internal Rate of Return* (IRR) and a *Net Present Value* (NPV). These should be carefully examined for accuracy. You can learn how to calculate the IRR and NPV through an "Info-miner course", available (for a fee) through Infomine.com.

The IRR is based on the calculation of annual cash flows for a company. It is very sensitive to start-up dates, when the reclamation bond has to be deposited, and the price of the metals over time.

MiningWatch Canada has undertaken a number of investor analyses of mining projects in Canada. In almost every case we reviewed, there were questionable assumptions and errors, which resulted in an over-estimation of cash flow and the Internal Rate of Return.

Common errors in IRR calculation are:

- not providing for a reclamation bond up-front,
- assuming the project can get its permits earlier than it can,
- crediting a possible sale of mine infrastructure at closure against remediation costs,
- assuming government subsidy for power, rail, ports, and roads,
- over-estimating the long term return on commodities (eg. forecasting gold prices at \$700 for ten years),
- under-estimating the difficulty in procuring equipment, materials, and labour when the demand for them is very high.
- underestimating smelter penalties for contaminated concentrates.

Infomine ([www.infomine.com](http://www.infomine.com)) is an excellent source of information on estimating costs and on other mine engineering and procurement questions. It requires a subscription. Another excellent reference is [www.minecost.com](http://www.minecost.com). Both sites provide a “free trial” before a subscription is required.

We will be pleased to send anyone who asks a sample of a feasibility study. Some excerpts from a study can be found in Appendix 4.

### ***A note on smelter penalties***

Each smelter’s pricing for the concentrates or ore it buys is different, based on the process it uses and the environmental standards for emissions in the jurisdiction where it operates.

For example, in the case of mercury, the smelter will have a limit for the mercury it is allowed to release from its stack. So when concentrate is delivered to the smelter, it is assayed. If the mercury in the mineral concentrate is low enough to allow the smelter to meet its legislated limits for mercury, then there is little or no penalty. If the mercury is above this level, the concentrate must be pre-processed to remove the mercury and the “smelter penalty” is the cost of removal (presumably with a profit margin). There generally is no penalty if the smelter is able to sell the by-product contaminant.

Individual smelter charges are rarely disclosed because that would entail disclosing the details of the mine’s concentrate. Each mining company wants to keep this price secret for competitive reasons, since it effectively discloses their margin and the buying price for their concentrate. Smelters process concentrate from different companies and so must keep the individual smelting contracts secret or none of them would deal with the smelter.

Potential environmental abuse can occur if a mining company decides to dilute its concentrate with waste rock before shipping to the smelter in order to bring the concentration of a contaminant like mercury down below the penalty level. Although it pays more for the processing (because it is having more tonnes processed to produce the same amount of mineral due to the lower concentrations), that extra cost is offset by the avoided penalty. However, in the end, the same amount of mercury goes up the stack, but it goes up over a longer time period and therefore meets the parts per million regulations.

Penalty schedules at smelters are usually not subject to negotiation.

If the ore is poly-metallic, it may be that one of the other metals is not a “product” but a contaminant. For example, if the price of selenium is high, zinc ore mixed with lots of selenium may be worth smelting because the selenium will become marketable commodity. However, if the price drops, then the selenium is considered a contaminant of the zinc, and the zinc smelter will impose a penalty for handling it. The same is usually true of mercury, arsenic and lead.

The terms of the feasibility study also have to consider transportation costs to the smelter. Although this information may not be public, “guesstimates” can be found with careful web searches.

### ***What questions do investors ask: a template for evaluating the feasibility of a mine proposal***

When investors are contemplating an investment in a new mining project, they ask a number of questions about it and about the company that is proposing the project. The kinds of questions they ask will be determined by the kind of company this is, and by the stage of development of the project.

These same questions can help a community or Aboriginal government figure out what they need to know in negotiating with a mining company. It is the right of the community to seek answers to any and all these questions. The answers should be available through the company's feasibility study and/or the environmental assessment. If a company is serious about developing a mine, it will be addressing these questions, and it should be making the answers available to the affected peoples.

When commodity prices are high, a lot of mining exploration is only a market play. The company is "mining investors" and not seriously interested in mining ore. Even mining investors creates problems for the communities, municipal and Aboriginal governments that have to deal with them. It takes time to review applications and monitor their activities, which is taken from other work. A staking rush can cause serious and uncontrolled damage on the land (because even speculators have to show drill results to attract investors). Anxiety and hype create divisions in communities which are already fragile.

However, the more damaging and long-term impacts will come from serious mining exploration that could lead to development. Mining companies that are engaging in this activity need sustained investor interest to develop their project. At the point where a project is moving from exploration to mine development, the company will start looking for a very different kind of investor...and investors will ask a very different set of questions.

To sustain investor interest for a project that a company wants to develop, the company needs to demonstrate to investors that:

1. They have a credible ore body
2. They can get access to the ore body, and to the land needed to develop it
3. They have a management that is experienced and has a proven track record
4. They can get access to a consistent supply of energy at a competitive rate
5. They can transport equipment, labour, materials to the site and transport ore/concentrates out at a competitive rate and without accidents
6. They can get a consistent supply of water for processing, etc. at a competitive price
7. They can get the skilled (and other) labour they need at a competitive rate
8. They have a market – smelters/refineries. etc. – that will accept their ore and pay competitively for it
9. They can easily and quickly obtain all environmental approvals and permits required
10. There is low potential for accidents and unfounded liability issues
11. They can generate a competitive rate of return on the project

#### *The key question template*

Below is a template that I have developed to look at the questions that investors (and communities) will want to explore:

1. Credible ore body
  - a. Review of drill results and estimates: ore grade, how was the cut-off grade set? How extensively is the area explored?
  - b. History of exploration on the deposit: did a large mining company walk away from it in the past? Does a credible company have an option on their project?
  - c. Do the results meet all securities commission criteria: are they *resources* or *measured reserves*, was the Qualified Person truly independent and are there any problems with his/her previous work?

- d. If this is a polymetallic mine, what will be the relationship between product streams in terms of costs, smelters, etc. (for example, if this is a zinc mine with lots of selenium, is there a market for selenium)?
  - e. Does the ore contain considerable contaminants that will result in serious smelter penalties or even refusals (eg. arsenic, antimony, mercury)?
2. Access to the ore body and the land to develop it
    - a. First Nations willingness to support the project and its supporting infrastructure; history of relationship with First Nations
    - b. Existence of Aboriginal title or claims on the land
    - c. Spiritual and cultural uses of the area
    - d. Geographic barriers to access – potential difficulties in terms of land for roads/rail, hydro
    - e. Other political/legal barriers to access (eg. planned protected areas or parks, a conflicting land use, etc.).
3. Management:
    - a. Who are the principals in the company, and what is their track record?
    - b. Who are the major investors and how committed are they?
    - c. Are all their regulatory filings transparent, clearly reflecting all risks?
    - d. Have there been many management changes?
    - e. What other projects is the company committed to? What, if any impact could they have on this project?
4. Energy
    - a. How much power will the project require?
    - b. What is the source of that power? How much will it cost? Are prices likely to remain affordable?
    - c. Are there huge infrastructure costs to develop the power source?
    - d. Will it need separate regulatory approvals?
5. Transportation
    - a. What are the plans for transportation infrastructure? (rail, roads, port development, etc.)
    - b. Will the company be transporting dangerous chemicals?
    - c. Will the transportation infrastructure need separate regulatory approvals?
    - d. Are prices realistic and affordable? Are they volatile?
    - e. What are the potentials for costly accidents or disruptions (avalanche, earthquake, hurricane, flooding, etc.)?
6. Water
    - a. How much water does the project need? Where will it come from?
    - b. Is the water source reliable? Is it contested?
    - c. What (if anything) will it cost?
    - d. Will water be contaminated? How will the costs of treatment be covered?
    - e. What hydrological impacts will the project have?
    - f. How will it affect groundwater/aquifers?
    - g. Will the project affect fish habitat? Aquatic ecosystems?
7. Labour
    - a. What are the labour needs: skilled and unskilled, at construction, operation?
    - b. Where will the labour supply come from? Is this realistic given other mining developments around the country?

- c. What is the Aboriginal interest in jobs/contracts? What about training, timing, etc.?
  - d. Where will workers from outside stay? Are the costs of transporting them properly estimated?
  - e. Labour history in area (strikes, dissatisfaction, laws, etc.)
8. Market
- a. Where will the ore be processed? Is there a need to transport ore to different smelters and refineries (eg, zinc, copper, gold)?
  - b. Is the anticipated market price correct/likely to go up or down, etc. (FOB<sup>14</sup> or mine mouth etc.)? Review market price history for the commodity.
  - c. What competition can the proponent expect for its product; nationally, internationally?
  - d. What penalties will there be for contaminants?
  - e. Can the proponent get the product to market (see transportation section)?
9. Regulatory Approvals and Permits
- a. What provincial and federal permits are required?
  - b. Does the project have transboundary elements? What are the implications of this?
  - c. What are requirements for closure and reclamation approvals and bonding?
  - d. What are the anticipated delays and blockages to getting permits: valued wilderness area, area of aboriginal heritage interest, competition with commercial fishery, hunters, etc., endangered species, public opposition?
  - e. Are there areas of regulatory uncertainty: changes to federal or provincial legislation, political uncertainty (eg. listing under Metal Mine Effluent Regulations)?
10. Unfunded liabilities
- a. What is the accident potential: earthquakes, avalanches, flood events, experimental technologies etc.?
  - b. What emergency/contingency plans are in place and are they realistic?
  - c. What are the closure and reclamation bonding requirements – state of regulatory enforcement, political environment, long-term liability?
11. Competitive rate of return
- a. Given the above, do analysis of company's claims on IRR
  - b. What prices are the IRR based on?
  - c. What is the rate of currency exchange/fluctuation used for the feasibility study? Most studies are based on US/Canadian exchange rates that are out-dated.
  - d. How does the company expect to finance development?

## Campaign tips

### *Why undertake an investor campaign?*

The first question to ask if you are considering using any of this information in a campaign is “why would you do it?” *Follow the Money* made the following point:

*“There are some potentially powerful connections to be made between the concerns of investors and the concerns of environmental activists...Investors need to know what*

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<sup>14</sup> “Free on Board” – the seller pays for transportation of the goods to the port of shipment, plus loading costs



*may impact the bottom-line of company profits and how that may affect share value and dividends. You may be able to help them become more informed...*

*“This Toolkit is intended to help make investors, companies and environmentalists more aware of and responsive to the risks and costs of the capital casino that drives mining. Beyond a few ethical funds, it is safe to assume that most investors do not care about the impacts on the environment. They do however, care about potential delays or reduced returns on their money, as well as the financial effects of increased liability and poor management decisions that may harm the company. A key objective of ‘follow the money’ strategies is to get greater direct or indirect access to investors to make them think twice about keeping money flowing to ‘high risk’ projects. In the future, conservation groups can and should play a role in getting investors to account for the environmental costs...*

*...Because in the end, affecting the availability of capital may be the most direct way to affect mineral activities themselves”<sup>15</sup>*

Cornerhouse uses the following as a checklist before deciding on a campaign to influence investors:

- Is the company publicly listed? Is it private, it will not have investors that can be identified.
- Is its finance from mainstream institutions such as banks, which might be influenced?
- Is the project is marginal on financial grounds?
- Is this the best option for influencing the project: are other avenues are closed or difficult?
- What is the level and type of financial institution involved? Will the company be responsive to a campaign?
- What are the synergies with other kinds of campaigning?
- Can the organization’s resources be more effectively used elsewhere?

It is important in undertaking any kind of investor campaigning to ensure that you are consistently accountable to the local communities you work with. Cornerhouse points out that there is always a risk of an NGO substituting its own agenda for communities. The rule is “first, do no harm”.<sup>16</sup> Make sure that affected people retain the initiative, and maintain long-term engagement with community and issue.

Finance strategies also pose serious risks for both the company and its opponents. They can result in SLAPPs (strategic lawsuits against public participation, usually for libel and/or defamation) and severe political reactions. Your research must be 100% accurate and your communications carefully worded. The company’s lawyers will be reading what you publish.

Framing an investor campaign would mean:

- 1) Undertaking basic research about the corporation and its investors (see template above). Does it have vulnerabilities?
- 2) Deciding on what you want to achieve. This will vary with the stage of development of the project. It is very different to try to stop a new mine, to influence it during operations, or to get it reclaimed during closure.
- 3) Deciding who can make the decisions you need (eg. regulators, investors, the company itself) and who can help influence those decisions (eg. media, public, organisations, politicians).

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<sup>15</sup> *Follow the Money*, page 1

<sup>16</sup> Cornerhouse, page 30

- 4) Sorting through different strategies to achieve your objectives and setting priorities.
- 5) Ensuring that all allies are 'on side' with the strategy.

If the company responds to your campaign, its because they want or need something from you... Ask yourself: are you in a legitimate political position, with sufficient technical expertise, to enter into discussions/negotiations with a company or other stakeholders?

### *Understanding corporate culture*

If you are considering a campaign to influence investors, either those speculating on junior stocks, or those looking at the development of a real mine, it is important to have an understanding of the corporate culture of mining companies, but it is equally, or more important, to understand the culture and psychology of the financial institutions you are seeking to influence.

“Financial institutions do not have a single culture...their modes of operation are local and evolving.”<sup>17</sup> Its culture is different if it is a limited partnership set up to sell and promote flow-through shares, a chartered bank, or an investment firm specializing in mining stocks like Dundee Securities or Canaccord Capital.

Even within an investment institution, there are different professions, and it is important to know how key players think. Who are they? What motivates them? How do you engage analysts, institutional investors, ethical investment funds, banks, public finance institutions? You need to be able to match the pressure points to the financial player, which may have different or contradictory interests.

Cornerhouse points out that investors are motivated by greed and fear: any campaign has to feed these motivations.<sup>18</sup>

The *Cornerhouse Campaigners Guide* (at page 54) provides a chart of players and their interests, as well as some excellent advice on understanding the audience for your information and analysis. For example, they make the point that, “once financiers have pronounced on a company, they are not usually receptive to outsider opinions.”

Since the securities industry is overwhelmingly conservative, it is important for campaigners to appear professional and knowledgeable about their case. Approaches should be crisp briefing notes, not lengthy tracts. Cornerhouse makes the point that analysts – who get deluged with mail every day – are “competitive and keen, have a short-term focus, and will distrust reports from campaigners, so it is necessary to use an independent analysis.”<sup>19</sup>

Research undertaken for Price Waterhouse Coopers has shown that 4 out of 10 people around the world boycotted a company for ethical reasons in 1999. It is true that even the business of making money has social and political limits, and that financial deals can be subject to public backlash. In general, “speculation frames the mentality of financial markets – giving rise to greed and fear... Companies are fearful of small investors acting like herd.”<sup>20</sup>

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<sup>17</sup> Cornerhouse, page 54

<sup>18</sup> Cornerhouse, page 13

<sup>19</sup> Cornerhouse, page 80

<sup>20</sup> Cornerhouse

***Where our power lies: specialized knowledge about mining impacts and communities***

Communities, Aboriginal communities and governments and NGOs are often strongest where financial institutions are at their weakest and most vulnerable. We often have “privileged local knowledge” about First Nations’ opposition to a mine, or the environmental setting, or similar problems, which are very significant to the mine’s ability to go ahead. The company’s reputation is of major concern to investors. There are many examples where well-documented case studies have affected investors.

Markets all involve an element of gambling. The riskier the venture the more an investor expects to gain if he “wins”. There are few stocks as risky as mineral exploration companies, and investment houses have to do risk assessment and due diligence. They can be liable in lawsuits if they do not. When we are able to expose hidden costs or risks to them, it might shift the balance of risk and reward.

Cornerhouse makes a number of important suggestions for how to make points to investors more powerfully. Where there is evidence of environmental damage, link it to corporate governance failures, a gap in the environmental impact statement, or a failure to cite material risk. Tell investors about protests that have been under-reported by the company, and about the instances where the company has bungled its handling of environmental, cultural and social issues. Can you see signs that the company is obsessed with an issue/project? Investors will be interested in damage done to company’s reputation by scandals affecting their directors and management, including conflict of interest. Show the ways in which the company’s attempts to manage its reputation will backfire if company is not committed to really changing its behaviour.

**Resource lists:*****Corporate research:***

**MiningWatch Canada** ([www.miningwatch.ca](http://www.miningwatch.ca)) is a coalition of labour, Aboriginal, environmental, social justice and development organizations from across Canada with a mandate to support communities affected by mining in Canada, and affected by Canadian mining companies around the world. Our web site provides a wealth of information about mining companies and the institutions they depend on. It also provides information about the activities of the movement for accountable mining practices all over the world, as well as links to other key sites. We do undertake corporate research for communities and NGOs on a (negotiable) fee-for-service basis.

**The Campaigners' Guide to Financial Markets: Effective Lobbying of Companies and Financial Institutions** (<http://www.thecornerhouse.org.uk/pdf/document/camguide.pdf>).

**The Corporate Research Project** ([www.corp-research.org](http://www.corp-research.org)) is a non-profit centre that assists community, environmental and labour organizations in researching and analyzing companies and industries. The Project is designed to be a resource to aid activism. Consequently, their focus is on strategic research, i.e., identifying the information activists can use as leverage to get business to behave in a socially responsible manner.

**The Polaris Institute** ([www.polarisinstitute.org](http://www.polarisinstitute.org)) works closely with the Council of Canadians. Polaris' stated objective is "to enable citizen movements to re-skill and re-tool themselves to fight for democratic social change in an age of corporate driven globalization. The Institute works with citizen movements in developing the kinds of strategies and tactics required to unmask and challenge the corporate power that is the driving force behind governments concerning public policy making on economic, social and environmental issues." They have undertaken a number of corporate analyses of major Canadian companies, but have no specific expertise on mining companies.

**The Data Center** ([www.datacenter.org](http://www.datacenter.org)) is a free service in the United States that can help with a number of corporate research activities. However, they know little about Canada or about mining projects. Their web site states that they help with the following:

- Developing strategy: Issue analysis, political landscape analysis, mapping power relationships, profiling decision-makers, uncovering conflicts of interest, researching corporate finances, labour and environmental track records, gathering experience from similar campaigns, discovering opportunities, finding allies.
- Democratizing research: Address the disconnect between community knowledge and "authoritative research" by helping communities learn and apply social science tools so they share "expert status" with policymakers and academic institutions.
- Supporting community-based research: Documenting community conditions and building community power by engaging members in research design, data collection, analysis and strategy.
- Transferring skills: Offer workshops (for free) to build on participants' existing knowledge and peer learning to equip them to conduct their own research and apply findings in their organizing and policy work.

**Endgame** ([www.endgame.org](http://www.endgame.org)) provides workshops and information on corporate power research for a fee (which may be negotiable). It is US-based.

**The Essential Organization** ([www.essential.org](http://www.essential.org)). Founded in 1982 by Ralph Nader, Essential Information is a non-profit, tax-exempt organization. They are involved in a variety of projects to

encourage citizens to become active and engaged in their communities. Essential Information publishes a monthly magazine, books and reports, sponsors investigative journalism conferences, provides writers with grants to pursue investigations and operate clearinghouses which disseminate information to grassroots organizations in the United States and the Third World.

**Corpwatch** ([www.corpwatch.org](http://www.corpwatch.org)) investigates and exposes corporate violations of human rights, environmental crimes, fraud and corruption around the world. They work to foster global justice, independent media activism and democratic control over corporations. There is a Corporate Research guide on their web site. CorpWatch published an analysis of Barrick Gold in 2007.

### *Canadian filings*

Definitions and information about different kinds of securities can be found on the Ontario Securities Commission web site at:

[http://www.osc.gov.on.ca/Investor/Resources/res\\_characteristics-of-securities\\_en.pdf](http://www.osc.gov.on.ca/Investor/Resources/res_characteristics-of-securities_en.pdf)

All publicly listed companies in Canada are required to report to the Securities and Exchange Database ([www.sedar.com](http://www.sedar.com)). Companies and Mutual funds are listed alphabetically, and their public filings can be searched and read for free.

### *US SEC filings*

There is a tutorial at <http://www.sec.gov/investor/pubs/edgarguide.htm>. It also provides a guide to reading financial statements. The database is at <http://www.sec.gov/edgar/searchedgar/webusers.htm>

Information and company reports can also be found at <http://hoovers.com/free>. The reports cost from \$69 US and up. Most of the information in them is available for free elsewhere. The Hoovers site provides a link to the Dun and Bradstreet business reports at <http://smallbusiness.dnb.com/default.asp> which may help with companies that do not issue public shares.

### *Other information for/about investors*

**Lexis-Nexis** ([www.nexis.com](http://www.nexis.com)). Very complete database, but can only be accessed through a university. It costs a minimum of \$250 a month. Most relevant are the “news” and “company” databases. Nexis also provides Nelson’s Directory of Investment Research and the Bank Loan Report, which you might be able to access through a public or university library.

**Bloomberg** ([www.bloomberg.com](http://www.bloomberg.com)). Bloomberg is an information-services, news and media company that provides business and financial professionals with the tools and data they need on an all-inclusive platform. The BLOOMBERG PROFESSIONAL service, the company’s core product, is the fastest-growing real-time financial information network in the world. It is very expensive (\$60,000 a year). If you can find an investment dealer to give you access, let us know!

**The Social Investment Organization** ([www.socialinvestment.ca](http://www.socialinvestment.ca)) is a national membership-based organization that includes financial institutions, investment firms, financial advisors and investors. The SIO’s mandate is to promote the practice of socially responsible investment (SRI): the integration of environmental, social and governance factors in the selection and management of investments. It has a Shareholder Advocacy Handbook available on its web site.

**The Shareholder Association for Research and Education** ([www.share.ca](http://www.share.ca)) is a national not-for-profit organization dedicated to improving institutional investment practices that protect the long-term interests of pension plan members, beneficiaries and society in general. SHARE was created in 2000 by the Canadian labour movement “to provide leadership around responsible investment activities at a national and international level.” It focuses particularly on the governance and investment of workers capital, the funds set aside in pension funds for workers’ retirement. They have a policy advocacy, education, proxy voting and shareholder engagement programme.

**Groupe Investissement Responsable** ([www.investissementresponsable.com](http://www.investissementresponsable.com)) aims “to contribute to the achievement of a more just and sustainable economy through the development, practice and promotion of socially responsible investment.”

World Bank Group and Export Credit agencies can be researched through the **Bank Information Centre** ([www.bicusa.org](http://www.bicusa.org)), the **Polaris Institute** ([www.polarisinstitute.org](http://www.polarisinstitute.org)), and the **Halifax Initiative** ([www.halifaxinitiative.org](http://www.halifaxinitiative.org)). **The Harvard Business School Project** finance portal ([www.hbs.edu/projfinportal](http://www.hbs.edu/projfinportal)) also has a number of case studies and other information.

**Project Finance Magazine** ([www.projectfinancemagazine.com](http://www.projectfinancemagazine.com)) provides case studies of how financing deals for very costly endeavours have been put together. It requires a subscription, and much of its information is not about mining projects. A two week trial subscription can be obtained for free.

**Canadian Business and Current Affairs** provides access to Canadian Business periodicals. Provided by most public libraries free of charge.

**Canadian Newstand** (online) provides a handy-dandy index of newspaper and periodical articles going back over 15 years. Only available via university or public libraries.

### ***Industry sources***

Some of the best information is available from sources set up to help the industry. The most useful is **Stockwatch** ([www.stockwatch.com](http://www.stockwatch.com)) which provides information on all publicly listed companies in Canada, including major investors, new releases and Sedar links. It also links to **Targeted Inc.** ([www.targeted.com](http://www.targeted.com)), which provides important institutional and other significant holdings data for securities trading in Canada. Targeted has the most current and complete holdings data on Canadian securities. The Subscription rates vary depending on the service level.

Another important source of information is **Infomine** ([www.infomine.com](http://www.infomine.com)). It not only provides regular news and analysis from a company point of view, it is an important source of information on mine cost estimating, engineering design, etc. The “Infominer” on-line tutorials are relatively inexpensive. Subscription rates vary depending on the service you wish to have.

**Minecost** ([www.minecost.com](http://www.minecost.com)) is a one-stop source of mine cost spreadsheet models and operating cost information based on verifiable engineering and production data and peer review by mining industry analysts from around the world. It provides some initial analysis for free.

**Advice for Investors** ([www.adviceforinvestors.com](http://www.adviceforinvestors.com)) provides company reports, and have a chat line about investments which might be useful.

**Mergent Manuals Online** ([www.mergentonline.com](http://www.mergentonline.com)) provides a detailed and comprehensive database of companies worldwide, as well as reports on companies. They provide the 25 largest institutional

holders, insider trading on companies. They also provide Latin America Reports. Used to be “Moodie’s Manuals”. The database is expensive, but provides a one-time trial.

There are newswire services that get information to brokers and analysts. In Canada, the key service is **Marketwire** ([www.marketwire.com](http://www.marketwire.com)). There is a fee to post press releases, and we have found that they will not publish releases when a mining company pressures them not to. The other service in Canada is **Canada NewsWire** or **CNW Telebec** ([www.cnw.ca](http://www.cnw.ca)). It does not have as broad a circulation as Marketwire, but is more willing to publish.

### ***Information on company practices:***

The greatest strength mining campaigners have in influencing mining investment is through our privileged access to community stories and the on-the-ground impacts of company practices. Networks of mining campaigners have web sites that are invaluable sources of information.

There are a number of web-based resources, run by mining activist organizations, that report on and archive information about mining issues and mining companies. The most significant English language ones are:

- [www.miningwatch.ca](http://www.miningwatch.ca)
- [www.minesandcommunities.org](http://www.minesandcommunities.org)
- [www.mineralpolicy.org](http://www.mineralpolicy.org)

There are other sources of information on company practices:

**PollutionWatch** ([www.pollutionwatch.org](http://www.pollutionwatch.org)) is a Canadian source for information about pollutants that facilities release and transfer in your community, including toxic pollutants (such as benzene, lead, dioxins and furans), Criteria Air Contaminants (pollutants that cause smog and acid rain) and greenhouse gases (air pollutants that lead to global climate change). According to the web site, you can:

- Find facilities in your neighbourhood using the new PollutionWatch mapping site
- Search for facilities in your area using your postal code.
- Search for facilities releasing Criteria Air Contaminants, pollutants that cause smog and acid rain.
- Search for facilities releasing greenhouse gases, air pollutants that cause global climate change
- Obtain information about the health effects associated with specific pollutants and groups of pollutants and find out if they are tracked by the federal government as part of the National Pollutant Release Inventory (NPRI).

The **Right-to-Know Network** (RTK NET) ([www.rtk.net](http://www.rtk.net)), a U.S. service provided by **OMB Watch** ([www.ombwatch.org](http://www.ombwatch.org) – a US organisation that monitors government performance), provides free access to numerous US environmental databases. With the information available on RTKNET, you can identify specific industrial facilities and their environmental effects, and assess the people and communities affected. It reports all the Toxics Release Inventory data annually, as does [www.scorecard.org](http://www.scorecard.org), the key pollution information web site in the United States.

Environment Canada has two inventories that track mining pollution data: the National Pollutant Release Inventory Data (NPRI) and Environmental Effects Monitoring (EEM)

At the time of writing, mining companies and smelters are required to annually report off-site releases of Criteria Air Contaminants to the NPRI. These releases can be viewed at <http://www.ec.gc.ca/npri/communities>. They are not required to report releases and transfers to tailings impoundments and waste rock dumps, but there is considerable pressure to change this situation.

Under the Metal Mining Effluent Regulations of the Federal Fisheries Act, companies are required to report on a number of parameters affecting water quality at the points where the mine effluent is released off site to receiving waters. Their reports can be viewed at:

<http://www.ec.gc.ca/eem/english/MetalMining/default.cfm>.

Some provinces have reports on violations of provincial laws and regulations on line. For example, Ontario violations can be seen at:

<http://www.ene.gov.on.ca/en/news/convictions/2007/index.php>.

**Lobbyist registration in Canada.** Anyone can search this database to see who has registered to lobby on a federal issue. Some provinces have similar databases.

<https://strategis.ic.gc.ca/app/secure/ec/lrrs/displaySearchReg.do;jsessionid=0000bD0UNXNGEcVFv9QWqG-62Tp:12edujrta?lang=eng>



## Appendix 1. The Canadian Institute of Minerals (CIM) Definition Standards

*CIM Definition Standards Page 3 of 10 Adopted by CIM Council, November 14, 2004*

The CIM Definition Standards presented herein provide standards for the classification of Mineral Resource and Mineral Reserve estimates into various categories. The category to which a resource or reserve estimate is assigned depends on the level of confidence in the geological information available on the mineral deposit; the quality and quantity of data available on the deposit; the level of detail of the technical and economic information which has been generated about the deposit, and the interpretation of the data and information.

### **Preliminary Feasibility Study**

The CIM Definition Standards requires the completion of a Preliminary Feasibility Study as the minimum prerequisite for the conversion of Mineral Resources to Mineral Reserves.

A Preliminary Feasibility Study is a comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established, where an effective method of mineral processing has been determined, and includes a financial analysis based on reasonable assumptions of technical, engineering, legal, operating, and economic factors and evaluation of other relevant factors which are sufficient for a Qualified Person, acting reasonably, to determine if all or part of the Mineral Resource may be classified as a Mineral Reserve.

### **Exploration Information**

Exploration information means geological, geophysical, geochemical, sampling, drilling, trenching, analytical testing, assaying, mineralogical, metallurgical and other similar information concerning a particular property that is derived from activities undertaken to locate, investigate, define or delineate a mineral prospect or mineral deposit.

*It is recognised that in the review and compilation of data on a project or property, previous or historical estimates of tonnage and grade, not meeting the minimum requirement for classification as Mineral Resource, may be encountered. If a Qualified Person reports Exploration Information in the form of tonnage and grade, it must be clearly stated that these estimates are conceptual or order of magnitude and that they do not meet the criteria of a Mineral Resource.*

### **Mineral Resource**

*Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.*

**A Mineral Resource** is a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of technical, economic, legal, environmental, socio-economic and governmental factors. The phrase

'reasonable prospects for economic extraction' implies a judgement by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. A Mineral Resource is an inventory of mineralization that under realistically assumed and justifiable technical and economic conditions, might become economically extractable. These assumptions must be presented explicitly in Reports.

**An 'Inferred Mineral Resource'** is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. Due to the uncertainty which may attach to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of feasibility or other economic studies.

**An 'Indicated Mineral Resource'** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Preliminary Feasibility Study which can serve as the basis for major development decisions.

Measured Mineral Resource

**A 'Measured Mineral Resource'** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity. Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

**Mineral Reserves are sub-divided in order of increasing confidence into Probable Mineral Reserves and Proven Mineral Reserves.** A Probable Mineral Reserve has a lower level of confidence than a Proven Mineral Reserve.

**A Mineral Reserve** is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined. Mineral Reserves are those parts of Mineral Resources which, after the application of all mining factors, result in an estimated tonnage and grade which, in the opinion of the Qualified Person(s) making the estimates, is the basis of an economically viable project after taking account of all relevant processing, metallurgical, economic, marketing, legal, environment, socio-economic and government factors. Mineral Reserves are inclusive of diluting material that will be mined in conjunction with the Mineral Reserves and delivered to the treatment plant or equivalent facility. The term 'Mineral Reserve' need not necessarily signify that extraction facilities are in place or operative or that all governmental approvals have been received. It does signify that there are reasonable expectations of such approvals.

**A 'Probable Mineral Reserve'** is the economically mineable part of an Indicated, and in some circumstances a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

**A 'Proven Mineral Reserve'** is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified. Application of the Proven Mineral Reserve category implies that the Qualified Person has the highest degree of confidence in the estimate with the consequent expectation in the minds of the readers of the report. The term should be restricted to that part of the deposit where production planning is taking place and for which any variation in the estimate would not significantly affect potential economic viability.

Reports dealing with estimates of Mineral Resources and Mineral Reserves must use only the terms and the definitions contained herein.

## Appendix 2. Relevant sections of the Ontario Business Corporations Act

### PART VII SHAREHOLDERS

#### Shareholders' liability limited

92. (1) The shareholders of a corporation are not, as shareholders, liable for any act, default, obligation or liability of the corporation except under subsection 34 (5), subsection 108 (5) and section 243. R.S.O. 1990, c. B.16, s. 92 (1).

#### Shares subject to call

(2) The provisions of the *Corporations Act* relating to the liability of a holder of shares that are not fully paid and to the enforcement of such liability apply in respect of shares that were not fully paid,

(a) on the 1st day of January, 1971, in the case of shares of a corporation that then became subject to *The Business Corporations Act*, being chapter 53 of the Revised Statutes of Ontario, 1970; or

(b) on the day upon which any other body corporate was continued under *The Business Corporations Act*, being chapter 53 of the Revised Statutes of Ontario, 1970, or under this Act, in the case of shares of such other body corporate. R.S.O. 1990, c. B.16, s. 92 (2).

#### Place of meetings

93. (1) Subject to the articles and any unanimous shareholder agreement, a meeting of shareholders of a corporation shall be held at such place in or outside Ontario as the directors determine or, in the absence of such a determination, at the place where the registered office of the corporation is located. R.S.O. 1990, c. B.16, s. 93.

#### Meeting by electronic means

(2) A meeting held under subsection 94 (2) shall be deemed to be held at the place where the registered office of the corporation is located. 1999, c. 12, Sched. F, s. 4.

#### Shareholders' meetings

94. (1) Subject to subsection 104 (1), the directors of a corporation,

(a) shall call an annual meeting of shareholders not later than eighteen months after the corporation comes into existence and subsequently not later than fifteen months after holding the last preceding annual meeting; and

(b) may at any time call a special meeting of shareholders. R.S.O. 1990, c. B.16, s. 94.

#### Meeting by electronic means

(2) Unless the articles or the by-laws provide otherwise, a meeting of the shareholders may be held by telephonic or electronic means and a shareholder who, through those means, votes at the meeting or establishes a communications link to the meeting shall be deemed for the purposes of this Act to be present at the meeting. 2001, c. 9, Sched. D, s. 2 (3).

#### Date for determining shareholders

95. (1) For the purpose of determining shareholders,

(a) entitled to receive payment of a dividend;

(b) entitled to participate in a liquidation or distribution; or

(c) for any other purpose except the right to receive notice of or to vote at a meeting,

the directors may fix in advance a date as the record date for such determination of shareholders, but the record date shall not precede by more than fifty days the particular action to be taken. R.S.O. 1990, c. B.16, s. 95 (1).

Idem

(2) For the purpose of determining shareholders entitled to receive notice of a meeting of shareholders, the directors may fix in advance a date as the record date for such determination of shareholders, but the record date shall not precede by more than fifty days or by less than twenty-one days the date on which the meeting is to be held. R.S.O. 1990, c. B.16, s. 95 (2).

Idem

(3) Where no record date is fixed,  
(a) the record date for the determination of shareholders entitled to receive notice of a meeting of shareholders shall be,  
(i) at the close of business on the day immediately preceding the day on which the notice is given, or  
(ii) if no notice is given, the day on which the meeting is held; and  
(b) the record date for the determination of shareholders for any purpose other than to establish a shareholder's right to receive notice of a meeting or to vote shall be at the close of business on the day on which the directors pass the resolution relating thereto. R.S.O. 1990, c. B.16, s. 95 (3).

Notice of date

(4) If a record date is fixed, unless notice of the record date is waived in writing by every holder of a share of the class or series affected whose name is set out in the securities register at the close of business on the day the directors fix the record date, notice thereof shall be given, not less than seven days before the date so fixed,

(a) by advertisement in a newspaper published or distributed in the place where the corporation has its registered office and in each place in Canada where it has a transfer agent or where a transfer of its shares may be recorded; and

(b) by written notice to each stock exchange in Canada on which the shares of the corporation are listed for trading. R.S.O. 1990, c. B.16, s. 95 (4).

Notice of shareholders' meetings

96. (1) Notice of the time and place of a meeting of shareholders shall be sent, in the case of an offering corporation, not less than twenty-one days and, in the case of any other corporation, not less than ten days, but, in either case, not more than fifty days, before the meeting,

(a) to each shareholder entitled to vote at the meeting;

(b) to each director; and

(c) to the auditor of the corporation. R.S.O. 1990, c. B.16, s. 96 (1).

Idem

(2) A notice of a meeting is not required to be sent to shareholders who were not registered on the records of the corporation or its transfer agent on the record date determined under subsection 95 (2) or (3), but failure to receive a notice does not deprive a shareholder of the right to vote at the meeting. R.S.O. 1990, c. B.16, s. 96 (2).

Idem

(3) If a meeting of shareholders is adjourned for less than thirty days, it is not necessary, unless the by-laws otherwise provide, to give notice of the adjourned meeting other than by announcement at the earliest meeting that is adjourned. R.S.O. 1990, c. B.16, s. 96 (3).

Idem

(4) If a meeting of shareholders is adjourned by one or more adjournments for an aggregate of thirty days or more, notice of the adjourned meeting shall be given as for an original meeting but, unless

the meeting is adjourned by one or more adjournments for an aggregate of more than ninety days, section 111 does not apply. R.S.O. 1990, c. B.16, s. 96 (4).

#### Special business

(5) All business transacted at a special meeting of shareholders and all business transacted at an annual meeting of shareholders, except consideration of the minutes of an earlier meeting, the financial statements and auditor's report, election of directors and reappointment of the incumbent auditor, shall be deemed to be special business. R.S.O. 1990, c. B.16, s. 96 (5).

#### Idem

(6) Notice of a meeting of shareholders at which special business is to be transacted shall state or be accompanied by a statement of,

(a) the nature of that business in sufficient detail to permit the shareholder to form a reasoned judgment thereon; and

(b) the text of any special resolution or by-law to be submitted to the meeting. R.S.O. 1990, c. B.16, s. 96 (6).

#### Shareholders' meeting

97. Subject to this Act or the articles or by-laws of a corporation or a unanimous shareholder agreement,

(a) all questions proposed for the consideration of the shareholders shall be determined by the majority of the votes cast and the chair presiding at the meeting shall not have a second or casting vote in case of an equality of votes;

(b) the chair presiding at a meeting of shareholders may, with the consent of the meeting and subject to such conditions as the meeting decides, adjourn the meeting from time to time and from place to place subject to subsections 96 (3) and (4); and

(c) the president or, in his or her absence, a vice-president who is a director shall preside as chair at a meeting of shareholders, but, if there is no president or such a vice-president or if at a meeting none of them is present within fifteen minutes after the time appointed for the holding of the meeting, the shareholders present shall choose a person from their number to be the chair. R.S.O. 1990, c. B.16, s. 97.

#### Waiving notice

98. A shareholder and any other person entitled to attend a meeting of shareholders may in any manner and at any time waive notice of a meeting of shareholders, and attendance of any such person at a meeting of shareholders is a waiver of notice of the meeting, except where such person attends a meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called. R.S.O. 1990, c. B.16, s. 98.

#### Proposal

99. (1) A shareholder entitled to vote at a meeting of shareholders may,

(a) submit to the corporation notice of a proposal; and

(b) discuss at the meeting any matter in respect of which the shareholder would have been entitled to submit a proposal. R.S.O. 1990, c. B.16, s. 99 (1).

#### Circulating proposal

(2) Where a corporation receives notice of a proposal and the corporation solicits proxies, it shall set out the proposal in the management information circular required by section 112 or attach the proposal thereto. R.S.O. 1990, c. B.16, s. 99 (2).

#### Statement in support of proposal

(3) If so requested by a shareholder giving notice of a proposal, the corporation shall include in the management information circular or attach thereto a statement by the shareholder of not more than two hundred words in support of the proposal along with the name and address of the shareholder. R.S.O. 1990, c. B.16, s. 99 (3).

Proposal may include nominations

(4) A proposal may include nominations for the election of directors if the proposal is signed by one or more holders of shares representing in the aggregate not less than 5 per cent of the shares or 5 per cent of the shares of a class or series of shares of the corporation entitled to vote at the meeting to which the proposal is to be presented, but this subsection does not preclude nominations being made at a meeting of shareholders. R.S.O. 1990, c. B.16, s. 99 (4).

Where subss. (2), (3) do not apply

(5) A corporation is not required to comply with subsections (2) and (3) where,

(a) the proposal is not submitted to the corporation at least sixty days before the anniversary date of the last annual meeting, if the matter is proposed to be raised at an annual meeting, or at least sixty days before a meeting other than the annual meeting, if the matter is proposed to be raised at a meeting other than the annual meeting;

(b) it clearly appears that the proposal is submitted by the shareholder primarily for the purpose of enforcing a personal claim or redressing a personal grievance against the corporation or any of its directors, officers or security holders, or for a purpose that is not related in any significant way to the business or affairs of the corporation;

(c) the corporation, at the shareholder's request, included a proposal in a management information circular relating to a meeting of shareholders held within two years preceding the receipt of the request, and the shareholder failed to present the proposal, in person or by proxy, at the meeting; or

(d) substantially the same proposal was submitted to shareholders in a management information circular or a dissident's information circular relating to a meeting of shareholders held within two years preceding the receipt of the shareholder's request and the proposal was defeated. R.S.O. 1990, c. B.16, s. 99 (5).

Where no liability

(6) No corporation or person acting on its behalf incurs any liability by reason only of circulating a proposal or statement in compliance with this section. R.S.O. 1990, c. B.16, s. 99 (6).

Where refusal to circulate proposal

(7) Where a corporation refuses to include a proposal in a management information circular, the corporation shall, within ten days after receiving the proposal, send notice to the shareholder submitting the proposal of its intention to omit the proposal from the management information circular and send to the shareholder a statement of the reasons for the refusal. R.S.O. 1990, c. B.16, s. 99 (7).

Idem

(8) Upon the application of a shareholder aggrieved by a corporation's refusal under subsection (7), the court may restrain the holding of the meeting to which the proposal is sought to be presented and make any further order it thinks fit. R.S.O. 1990, c. B.16, s. 99 (8).

Idem

(9) The corporation or any person aggrieved by a proposal may apply to the court for an order permitting the corporation to omit the proposal from the management information circular, and the court, if it is satisfied that subsection (5) applies, may make **such order as it thinks fit. R.S.O. 1990, c. B.16, s. 99 (9).**

**Idem**

(10) An applicant under subsection (8) or (9) shall give the Director notice of the application and the Director is entitled to appear and be heard in person or by counsel. R.S.O. 1990, c. B.16, s. 99 (10).

**Definition**

(11) In this section, “proposal” means a matter that a shareholder entitled to vote proposes to raise at a meeting of shareholders. R.S.O. 1990, c. B.16, s. 99 (11).

## List of shareholders

100. (1) A corporation shall prepare a list of shareholders entitled to receive notice of a meeting, arranged in alphabetical order and showing the number of shares held by each shareholder, which list shall be prepared,

(a) if a record date is fixed under subsection 95 (2), not later than ten days after such record date; or

(b) if no record date is fixed,

(i) at the close of business on the day immediately preceding the day on which notice is given,

or

(ii) where no notice is given, on the day on which the meeting is held. R.S.O. 1990, c. B.16, s. 100 (1).

## Entitlement to vote

(2) Where a corporation fixes a record date under subsection 95 (2), a person named in the list prepared under clause (1) (a) is entitled to vote the shares shown opposite the person’s name at the meeting to which the list relates, except to the extent that,

(a) the person has transferred any shares after the record date; and

(b) the transferee of those shares,

(i) produces properly endorsed share certificates, or

(ii) otherwise establishes that the transferee owns the shares,

and demands, not later than ten days before the meeting, or such shorter period before the meeting as the by-laws of the corporation may provide, that the transferee’s name be included in the list before the meeting, in which case the transferee is entitled to vote those shares at the meeting. R.S.O. 1990, c. B.16, s. 100 (2).

## Idem

(3) Where a corporation does not fix a record date under subsection 95 (2), a person named in a list prepared under clause (1) (b) is entitled to vote the shares shown opposite the person’s name at the meeting to which the list relates, except to the extent that,

(a) the person has transferred any shares after the date on which a list referred to in subclause (1) (b) (i) is prepared; and

(b) the transferee of those shares,

(i) produces properly endorsed share certificates, or

(ii) otherwise establishes that the transferee owns the shares,

and demands not later than ten days before the meeting, or such shorter period before the meeting as the by-laws of the corporation may provide, that the transferee’s name be included in the list before the meeting, in which case the transferee is entitled to vote those shares at the meeting. R.S.O. 1990, c. B.16, s. 100 (3).

## Examination of list

(4) A shareholder may examine the list of shareholders,



(a) during usual business hours at the registered office of the corporation or at the place where its central securities register is maintained; and

(b) at the meeting of shareholders for which the list was prepared. R.S.O. 1990, c. B.16, s. 100 (4).

#### Quorum

101. (1) Unless the by-laws otherwise provide, the holders of a majority of the shares entitled to vote at a meeting of shareholders, whether present in person or represented by proxy, constitute a quorum. R.S.O. 1990, c. B.16, s. 101 (1).

#### Idem

(2) If a quorum is present at the opening of a meeting of shareholders, the shareholders present may, unless the by-laws otherwise provide, proceed with the business of the meeting even if a quorum is not present throughout the meeting. R.S.O. 1990, c. B.16, s. 101 (2).

#### Idem

(3) If a quorum is not present at the time appointed for a meeting of shareholders, or within such reasonable time thereafter as the shareholders present may determine, the shareholders present may adjourn the meeting to a fixed time and place but may not transact any other business. R.S.O. 1990, c. B.16, s. 101 (3).

#### Where only one shareholder

(4) If a corporation has only one shareholder, or only one holder of any class or series of shares, the shareholder present in person or by proxy constitutes a meeting. R.S.O. 1990, c. B.16, s. 101 (4).

#### Voting rights

102. (1) Unless the articles otherwise provide, each share of a corporation entitles the holder thereof to one vote at a meeting of shareholders. R.S.O. 1990, c. B.16, s. 102 (1).

#### Representative

(2) Where a body corporate or association is a shareholder of a corporation, the corporation shall recognize any individual authorized by a resolution of the directors or governing body of the body corporate or association to represent it at meetings of shareholders of the corporation. R.S.O. 1990, c. B.16, s. 102 (2).

#### Idem

(3) An individual authorized as set out in subsection (2) may exercise on behalf of the body corporate or association he or she represents all the powers it could exercise if it were an individual shareholder. R.S.O. 1990, c. B.16, s. 102 (3).

#### Joint shareholders

(4) Unless the by-laws otherwise provide, where two or more persons hold shares jointly, one of those holders present at a meeting of shareholders may in the absence of the others vote the shares, but if two or more of those persons are present, in person or by proxy, they shall vote as one on the shares jointly held by them. R.S.O. 1990, c. B.16, s. 102 (4).

#### Manner of voting

103. (1) Unless the by-laws otherwise provide, voting at a meeting of shareholders shall be by show of hands, except where a ballot is demanded by a shareholder or proxyholder entitled to vote at the meeting. R.S.O. 1990, c. B.16, s. 103 (1).

**Idem**

(2) A shareholder or proxyholder may demand a ballot either before or after any vote by show of hands. R.S.O. 1990, c. B.16, s. 103 (2).

**Entry in minutes**

(3) Unless a ballot is demanded, an entry in the minutes of a meeting of shareholders to the effect that the chair declared a motion to be carried is admissible in evidence as proof of the fact, in the absence of evidence to the contrary, without proof of the number or proportion of the votes recorded in favour of or against the motion. R.S.O. 1990, c. B.16, s. 103 (3).

**Resolution in lieu of meeting**

104. (1) Except where a written statement is submitted by a director under subsection 123 (2) or where representations in writing are submitted by an auditor under subsection 149 (6),

(a) a resolution in writing signed by all the shareholders or their attorney authorized in writing entitled to vote on that resolution at a meeting of shareholders is as valid as if it had been passed at a meeting of the shareholders; and

(b) a resolution in writing dealing with all matters required by this Act to be dealt with at a meeting of shareholders, and signed by all the shareholders or their attorney authorized in writing entitled to vote at that meeting, satisfies all the requirements of this Act relating to that meeting of shareholders. R.S.O. 1990, c. B.16, s. 104 (1); 2000, c. 26, Sched. B, s. 3 (5, 6).

**Copy of resolution kept with minutes**

(2) A copy of every resolution referred to in subsection (1) shall be kept with the minutes of the meetings of shareholders. R.S.O. 1990, c. B.16, s. 104 (2).

**Requisition for shareholders meeting**

105. (1) The holders of not less than 5 per cent of the issued shares of a corporation that carry the right to vote at a meeting sought to be held may requisition the directors to call a meeting of shareholders for the purposes stated in the requisition. R.S.O. 1990, c. B.16, s. 105 (1).

**Idem**

(2) The requisition referred to in subsection (1) shall state the business to be transacted at the meeting and shall be sent to the registered office of the corporation. R.S.O. 1990, c. B.16, s. 105 (2).

**Duty of directors to call meeting**

(3) Upon receiving the requisition referred to in subsection (1), the directors shall call a meeting of shareholders to transact the business stated in the requisition unless,

(a) a record date has been fixed under subsection 95 (2) and notice thereof has been given under subsection 95 (4);

(b) the directors have called a meeting of shareholders and have given notice thereof under section 96; or

(c) the business of the meeting as stated in the requisition includes matters described in clauses 99 (5) (b) to (d). R.S.O. 1990, c. B.16, s. 105 (3).

**Where requisitioner may call meeting**

(4) Subject to subsection (3), if the directors do not within twenty-one days after receiving the requisition referred to in subsection (1) call a meeting, any shareholder who signed the requisition may call the meeting. R.S.O. 1990, c. B.16, s. 105 (4).

**Calling of meeting**

(5) A meeting called under this section shall be called as nearly as possible in the manner in which meetings are to be called under the by-laws, this Part and Part VIII. R.S.O. 1990, c. B.16, s. 105 (5).

#### Repayment of expenses

(6) The corporation shall reimburse the shareholders for the expenses reasonably incurred by them in requisitioning, calling and holding the meeting unless the shareholders have not acted in good faith and in the interest of the shareholders of the corporation generally. R.S.O. 1990, c. B.16, s. 105 (6).

#### Requisition by court

106. (1) If for any reason it is impracticable to call a meeting of shareholders of a corporation in the manner in which meetings of those shareholders may be called or to conduct the meeting in the manner prescribed by the by-laws, the articles and this Act, or if for any other reason the court thinks fit, the court, upon the application of a director or a shareholder entitled to vote at the meeting, may order a meeting to be called, held and conducted in such manner as the court directs and upon such terms as to security for the costs of holding the meeting or otherwise as the court deems fit. R.S.O. 1990, c. B.16, s. 106 (1).

#### Power of court

(2) Without restricting the generality of subsection (1), the court may order that the quorum required by the by-laws, the articles or this Act be varied or dispensed with at a meeting called, held and conducted under this section. R.S.O. 1990, c. B.16, s. 106 (2).

#### Effect of meeting

(3) A meeting called, held and conducted under this section is for all purposes a meeting of shareholders of the corporation duly called, held and conducted. R.S.O. 1990, c. B.16, s. 106 (3).

#### Determination of controversy

107. (1) A corporation, shareholder or director may apply to the court to determine any controversy with respect to an election or appointment of a director or auditor of the corporation. R.S.O. 1990, c. B.16, s. 107 (1).

#### Court order

(2) Upon an application under this section, the court may make any order it thinks fit including, without limiting the generality of the foregoing,

- (a) an order restraining a director or auditor whose election or appointment is challenged from acting pending determination of the dispute;
- (b) an order declaring the result of the disputed election or appointment;
- (c) an order requiring a new election or appointment and including in the order directions for the management of the business and affairs of the corporation until a new election is held or appointment made; and
- (d) an order determining the voting rights of shareholders and of persons claiming to own shares. R.S.O. 1990, c. B.16, s. 107 (2).

#### Agreement between shareholders

108. (1) A written agreement between two or more shareholders may provide that in exercising voting rights the shares held by them shall be voted as therein provided. R.S.O. 1990, c. B.16, s. 108 (1).

#### Idem

(2) A written agreement among all the shareholders of a corporation or among all the shareholders and one or more persons who are not shareholders may restrict in whole or in part the

powers of the directors to manage or supervise the management of the **business and affairs of the corporation. R.S.O. 1990, c. B.16, s. 108 (2).**

#### **Unanimous shareholder agreement**

(3) Where a person who is the beneficial owner of all the issued shares of a corporation makes a written declaration that restricts in whole or in part the powers of the directors to manage or supervise the management of the business and affairs of a corporation, the declaration shall be deemed to be a unanimous shareholder agreement. R.S.O. 1990, c. B.16, s. 108 (3).

#### Party to unanimous shareholder agreement

(4) Subject to subsection 56 (3), a transferee of shares subject to a unanimous shareholder agreement shall be deemed to be a party to the agreement. R.S.O. 1990, c. B.16, s. 108 (4).

#### Where shareholder has power, etc., of director

(5) A shareholder who is a party to a unanimous shareholder agreement has all the rights, powers, duties and liabilities of a director of the corporation, whether arising under this Act or otherwise, to which the agreement relates to the extent that the agreement restricts the discretion or powers of the directors to manage or supervise the management of the business and affairs of the corporation and the directors are thereby relieved of their duties and liabilities, including any liabilities under section 131, to the same extent. R.S.O. 1990, c. B.16, s. 108 (5).

#### Matter that a unanimous shareholder agreement may provide

(6) A unanimous shareholder agreement may, without restricting the generality of subsection (2), provide that,

(a) any amendment of the unanimous shareholder agreement may be effected in the manner specified therein; and

(b) in the event that shareholders who are parties to the unanimous shareholder agreement are unable to agree on or resolve any matter pertaining to the agreement, the matter may be referred to arbitration under such procedures and conditions as are specified in the unanimous shareholder agreement. R.S.O. 1990, c. B.16, s. 108 (6).

## PART VIII PROXIES

### Definitions

109. In this Part,

“dissident’s information circular” means the circular referred to in clause 112 (1) (b); (“circulaire d’information d’un dissident”)

“form of proxy” means a form that is in written or printed format or a format generated by telephonic or electronic means and that becomes a proxy when completed and signed in writing or electronic signature by or on behalf of a shareholder; (“formule de procuration”)

“management information circular” means the circular referred to in clause 112 (1) (a); (“circulaire d’information de la direction”)

“proxy” means a completed and signed form of proxy by means of which a shareholder has appointed a proxyholder to attend and act on a shareholder’s behalf at a meeting of shareholders; (“procuration”)

“solicit” and “solicitation” include,

(a) a request for a proxy whether or not accompanied by or included in a form of proxy,

(b) a request to execute or not to execute a form of proxy or to revoke a proxy,

(c) the sending of a form of proxy or other communication to a shareholder under circumstances reasonably calculated to result in the procurement, withholding or revocation of a proxy, and

(d) the sending of a form of proxy to a shareholder under section 111,

but do not include,

(e) the sending of a form of proxy in response to an unsolicited request made by or on behalf of a shareholder,

(f) the performance of administrative acts or professional services on behalf of a person soliciting a proxy,

(g) the sending of material under section 49 of the *Securities Act*,

(h) a solicitation by a person in respect of shares of which the person is the beneficial owner; (“solicitation”, “soliciter”) “solicitation by or on behalf of the management of a corporation” means a solicitation by any person under a resolution or the instructions of the directors of that corporation or a committee of such directors. (“sollicitation effectuée par la direction ou pour son compte”) R.S.O. 1990, c. B.16, s. 109; 1999, c. 12, Sched. F, s. 6.

#### Proxies

110. (1) Every shareholder entitled to vote at a meeting of shareholders may by means of a proxy appoint a proxyholder or one or more alternate proxyholders, who need not be shareholders, as the shareholder’s nominee to attend and act at the meeting in the manner, to the extent and with the authority conferred by the proxy. R.S.O. 1990, c. B.16, s. 110 (1).

#### Signature

(2) Subject to subsection (4.2), a proxy must be signed,

(a) in writing or by electronic signature by the shareholder or an attorney who is authorized by a document that is signed in writing or by electronic signature; or

(b) if the shareholder is a body corporate, by an officer or attorney of the body corporate duly authorized. 1999, c. 12, Sched. F, s. 7 (1).

#### Expiry

(2.1) A proxy appointing a proxyholder to attend and act at a meeting or meetings of shareholders of an offering corporation ceases to be valid one year from its date. 1999, c. 12, Sched. F, s. 7 (1).

#### Form of proxy

(3) Every form of proxy shall comply with the regulations. R.S.O. 1990, c. B.16, s. 110 (3).

#### Revocation

(4) A shareholder may revoke a proxy,

(a) by depositing an instrument in writing that complies with subsection (4.1) and that is signed by the shareholder or by an attorney who is authorized by a document that is signed in writing or by electronic signature;

(b) by transmitting, by telephonic or electronic means, a revocation that complies with subsection (4.1) and that, subject to subsection (4.2), is signed by electronic signature; or

(c) in any other manner permitted by law. 1999, c. 12, Sched. F, s. 7 (2).

#### Time of revocation

(4.1) The instrument or the revocation must be received,

(a) at the registered office of the corporation at any time up to and including the last business day preceding the day of the meeting, or any adjournment of it, at which the proxy is to be used; or

(b) by the chair of the meeting on the day of the meeting or an adjournment of it. 1999, c. 12, Sched. F, s. 7 (2).

#### Electronic signature

(4.2) A shareholder or an attorney may sign, by electronic signature, a proxy, a revocation of proxy or a power of attorney authorizing the creation of either of them if the means of electronic signature permits a reliable determination that the document was created or communicated by or on behalf of the shareholder or the attorney, as the case may be. 1999, c. 12, Sched. F, s. 7 (2).

#### Time limit for deposit

(5) The directors may by resolution fix a time not exceeding forty-eight hours, excluding Saturdays and holidays, preceding any meeting or adjourned meeting of shareholders before which time proxies to be used at that meeting must be deposited with the corporation or an agent thereof, and any period of time so fixed shall be specified in the notice calling the meeting. R.S.O. 1990, c. B.16, s. 110 (5).

#### Mandatory solicitation of proxy

111. The management of an offering corporation shall, concurrently with or prior to sending notice of a meeting of shareholders, send a form of proxy to each shareholder who is entitled to receive notice of the meeting. R.S.O. 1990, c. B.16, s. 111.

#### Information circular

112. (1) No person shall solicit proxies in respect of an offering corporation unless,  
(a) in the case of solicitation by or on behalf of the management of the corporation, a management information circular in prescribed form, either as an appendix to or as a separate document accompanying the notice of the meeting; or  
(b) in the case of any other solicitation, a dissident's information circular in prescribed form, is sent to the auditor of the corporation, to each shareholder whose proxy is solicited and, if clause (b) applies, to the corporation. R.S.O. 1990, c. B.16, s. 112 (1).

#### Filing copy

(2) A person, upon sending a management or dissident's information circular, shall concurrently file with the Commission,  
(a) in the case of a management information circular, a copy thereof together with a copy of the notice of meeting, form of proxy and of any other documents for use in connection with the meeting; and  
(b) in the case of a dissident's information circular, a copy thereof together with a copy of the form of proxy and of any other documents for use in connection with the meeting. R.S.O. 1990, c. B.16, s. 112 (2).

#### Exemption order re ss. 111, 112

113. Upon the application of any interested person, the Commission may, if satisfied in the circumstances of the particular case that there is adequate justification for so doing, make an order, on such terms and conditions as the Commission may impose, exempting, in whole or in part, any person from the requirements of section 111 or from the requirements of section 112. R.S.O. 1990, c. B.16, s. 113.

#### Proxyholder

114. (1) A person who solicits a proxy and is appointed proxyholder shall attend in person or cause an alternate proxyholder to attend the meeting in respect of which the proxy is given and comply with the directions of the shareholder who appointed the person. R.S.O. 1990, c. B.16, s. 114 (1).

#### Rights of proxyholder

(2) A proxyholder or an alternate proxyholder has the same rights as the shareholder who appointed him or her to speak at a meeting of shareholders in respect of any matter, to vote by way of

ballot at the meeting and, except where a proxyholder or an alternate proxyholder has conflicting instructions from more than one shareholder, to vote at such a meeting in respect of any matter by way of a show of hands. R.S.O. 1990, c. B.16, s. 114 (2).

**Vote**

(3) Despite subsections (1) and (2), where the chair of a meeting of shareholders declares to the meeting that, to the best of his or her belief, if a ballot is conducted, the total number of votes attached to the shares represented at the meeting by proxy required to be voted against what will be the decision of the meeting in relation to any matter or group of matters is less than 5 per cent of all the votes that might be cast at the meeting on such ballot, and where a shareholder, proxyholder or alternate proxyholder does not demand a ballot,

(a) the chair may conduct the vote in respect of that matter or group of matters by a show of hands; and

(b) a proxyholder or alternate proxyholder may vote in respect of that matter or group of matters by a show of hands. R.S.O. 1990, c. B.16, s. 114 (3).

### Appendix 3. More information on Federal Exploration Taxation

(An example of impacts from North West British Columbia, July, 2007)

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#### A. Layers of taxation paid by mining companies

The federal government imposes a number of taxes on the mining industry which include corporate income taxes, capital tax, the GST, payroll levies and excise taxes and customs duties.

**Canadian Exploration Expenses (CEE)** (Section 66.1(6) of the Income Tax Act). These are expenses incurred for the purpose of determining the existence, location, extent or quantity of a mineral resource, including prospecting, geo-chemical and geophysical surveys, drilling, trenching and preliminary sampling, removing overburden, sinking a mine shaft (pre-production development costs). Since 2007 they include costs for environmental assessment and Aboriginal consultation but not the purchase of mineral claims. Any portion not used in the year the expenditure was incurred can be carried forward indefinitely.<sup>21</sup> This creates a pool of expenditures which can be transferred to subsidiaries and upon sale of the company. It is often a reason to keep a floundering mining company alive rather than wind it up.<sup>22</sup>

**Canadian Development Expenses (CDE)** (Section 66.25 of the Income Tax Act). These are expenses incurred in excavating a mineshaft, acquiring new resource properties, and building underground workings ‘prior to the commencement of production of the resource in reasonable commercial quantities’. It also applies to sinking of excavating a mine shaft or similar underground work AFTER the mine has come into production. CDE is accumulated in a pool called Cumulative Canadian Development Expenses. Up to 30% of the unclaimed balance in the pool may be claimed each year. The pool is transferable and can be carried forward indefinitely.<sup>23</sup>

**Flow Through Shares (FTS).** Companies are allowed to renounce or flow through CEE and CDE expenses to shareholders so that an investor can use them as a tax loss. Investors get a 100% tax deduction for the money they invested in the shares, and they are enabled to speculate on the value of the share over time. The federal government also provides a 15% tax credit to investors under the “Super Flow through Share Program”<sup>24</sup> (described in more detail below).

**Investment Tax Credits for Exploration.** ITC’s are available federally and in many provinces for scientific research, for investments in some regions of Canada, and to individual purchasers of flow-through shares where the funds are spent on mineral exploration. The federal

#### B. How do flow-through shares work?

Flow Through Shares for mining have been in the Income Tax Act since 1954. The ‘super’ flow-through program, a tax incentive for “grassroots” mineral exploration (i.e. mineral extraction at a virgin

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<sup>21</sup> Brian R. Carr. ‘Exploration and Development’, *Fundamentals of Canadian Taxation*, December, 2006

<sup>22</sup> When Royal Oak Mines was in receivership in 2001, the CEE and CDE tax pool for the Kemess Mine was over \$200 million, and one of the creditors, Northgate agreed to accept the mine and tax pool in return for its debt. The mine has operated successfully ever since.

<sup>23</sup> Brian R. Carr. Page 26

<sup>24</sup> Brian R. Carr. ‘Flow-Through Shares’. *Fundamentals of Canadian Taxation*, December 2006



site as opposed to an old mine site), was introduced in October 2000 as a temporary measure to help moderate the effect of a global downturn in mineral exploration in the 1990s.

The original three-year program has been extended five times since its inception, each time for additional one-year periods. The program enables mining companies to allocate a portion of their exploration losses to investors to use as a loss on their tax returns. It also provides a 15% tax credit to these investors. The most recent version of the tax credit expires in March 2008, although the Industry is pushing for making it permanent.

Another federal Investment Tax Credit enables certain mineral exploration companies to receive a 10% credit for their investment in a mineral exploration project on previously undeveloped land. The mining exploration corporate tax credit was institutionalized with Bill C-48 introduced at the end of 2003<sup>25</sup>.

British Columbia (like Quebec, Ontario and Manitoba) has a provincial "Super Flow-through Program". The British Columbia Mining Flow Through Share Tax Credit (BC MFTS) was introduced in a July 2001 Economic and Fiscal Update and is harmonized with the federal ITCE. It provides a 20% non-refundable tax credit on qualifying BC flow-through expenditures. It can be applied against BC income tax payable with an unused credit carried back three years and forward ten years.<sup>26</sup> It expires in 2008.

The staked Super Flow-Through Shares programs enrich speculative investors by reducing the after-tax cost of a \$1,000 investment in exploration in Canada to as little as \$382 in BC<sup>27</sup>.

The clearest explanation of the Super Flow Through Share program is found in a brochure developed by the Prospectors and Developers Association of Canada (Appendix 5) The second page of the brochure includes a table of tax savings by province.

The Short Form Prospectus for a Redcorp share offering on August 31, 2006, includes with it a detailed legal account of the Canadian tax system, the benefits available to investors, as well as a sample agreement between the investor and the company regarding Flow Through Shares. This can be searched on the [www.sedar.com](http://www.sedar.com) site.

"Super" flow-through shares are only available to individual investors for "grassroots exploration". A company can only renounce expenses that are allowed under the CEE or CDE to these investors.

### C. What governs flow-through shares?

*Chapter 66.1(6) of the Income Tax Act* provides the authority for Flow Through shares federally. Both the BC and federal Investment Tax Credits are approved in budget estimates.

Disclosure when FTS are being offered for sale is governed by the British Columbia Securities Commission National Instrument 44-101 "Short Form Prospectus Distributions", which can be downloaded from [www.qp.gov.bc.ca/stratreg/reg/S/Securities/424\\_2000.htm](http://www.qp.gov.bc.ca/stratreg/reg/S/Securities/424_2000.htm).

The Canadian Institute of Chartered Accountants (CICA) provides rulings on how companies are to report gains/losses from FTS in their financial reports.

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<sup>25</sup> Department of Finance Budget 2004 Annex 1 above. See also: *Super Flow Through Shares*, Prospectors and Developers Association of Canada, 2005

<sup>26</sup> <http://www.sbr.gov.bc.ca/itb/mfts/mfts.htm>.

<sup>27</sup> PDAC brochure.

In May 2005, CICA approved EIC-146, Flow-Through Shares “*The issue in section 1 of EIC-146 is: when should a company recognize the tax effect related to renounced deductions? The Committee has been made aware that there is diversity in practice on how to interpret the phrase “the date that the company renounces the tax credits” in the EIC discussion paragraph containing the EIC consensus in section 1.*

*“The Committee reconfirmed its intent that the date referred to in the consensus in section 1 is the date that the company files the renouncement document with the tax authorities. To clarify this consensus, the Committee approved the revisions to the EIC discussion paragraph as set out in the markup below.*

*“The Committee reached a consensus that the future income tax liability should be recognized, and the shareholder’s equity reduced, on the date that the company files the renouncement documents with the tax authorities to renounce the tax credits associated with the expenditures, provided there is reasonable assurance that the expenditures will be made. The Committee noted that the date of this renouncement by the company may differ from the effective date of the renouncement that allows an investor to claim the tax deduction.”*

D. How many companies in the northwestern region of British Columbia use flow-through shares and to what extent?

A Report from the Regional Geologist in Smithers on the North West Region in Exploration and Mining in British Columbia 2006 ([http://www.empr.gov.bc.ca/DL/GSBPubs/Expl-BC/2006/2006\\_NW.pdf](http://www.empr.gov.bc.ca/DL/GSBPubs/Expl-BC/2006/2006_NW.pdf)) lists 60 “major exploration projects” in the North West region of the province. It includes a map showing the location of all these projects.

A search of securities filings ([www.sedar.com](http://www.sedar.com)) documents on each of these companies, reveals that at least 40 of them depended on flow-through shares in 2006 and 2007 to raise money for exploration, and of the 20 that did not, 1 was inactive, 8 were owned by private companies, not yet public, and 3 were owned by producing mining companies.

In 2006, the 40 companies raised a total of \$78,200,124 and in the first half of 2007, raised \$49,098,077, for a total in an 18 month period of \$127,298,201.

#### **Appendix 4. Sample of feasibility study**

I will be pleased to send a copy of the eighty-page 2005 **Casa Berardi Project Feasibility Study Executive Summary** to anyone who asks me. If you have an Infomine premium subscription (\$250/month), you can view it at: <http://premium.infomine.com/plus/infoPDFs/Pa305392.PDF>

Following are some excerpts from the financial analysis section, to show how these figures are calculated. There would also be background studies that provided this information, which would probably *not* be made available to interested parties.

**16.0 CAPITAL COST ESTIMATE****Summary of Estimate Capital Costs**

The total pre-production capital cost of the Project is estimated at \$84.1 Million and is summarized in Table T-9. This cost is based on the underground development, underground infrastructure, ore processing plant rehabilitation and modifications and other surface construction work required to achieve the production objectives of the Project.

**Table T-9 – Total Pre-Production Capital Cost Estimate**

Item	Cost (\$)
<b>Direct Costs</b>	
<b>Underground Mine</b>	
Headframe / Hoist	5,270,705
Shaft	18,000,083
Mine Development	19,655,410
Underground Infrastructure	<u>11,669,957</u>
<b>Sub-Total</b>	<b>54,596,155</b>
<b>Cement Plant</b>	
	<b>924,739</b>
<b>Ore Processing Plant</b>	
Additions and Modifications	5,013,379
Rehabilitations	<u>1,437,874</u>
<b>Sub-Total</b>	<b>6,451,253</b>
<b>Tailings Disposal</b>	
	<b>350,000</b>
<b>Mine Infrastructure</b>	
Electrical Supply	3,464,471
Sanitary Installation	349,000
Water Supply	<u>200,000</u>
<b>Sub-Total</b>	<b>4,013,471</b>
<b>Total Direct Costs</b>	<b>66,335,618</b>
<b>Indirect Costs</b>	
Permits	197,000
Engineering	1,538,008
Procurement & Construction	551,572
Start-up and commissioning (Ore Processing Mill)	112,980
Spares (Ore Processing Mills)	240,000
Training	200,000
Room and Board (Contractors)	270,500
Contingency on Direct Costs (10.2%)	6,766,233
Owner's Costs	7,931,352
<b>Total Indirect Costs</b>	<b>17,807,645</b>
<b>TOTAL CAPITAL COST</b>	<b>84,143,263</b>

### Scope and Basis of the Estimate

The capital cost estimate includes the work required to start a new mining operation, rehabilitate and modify an existing processing plant to 2600 tpd capacity to produce gold, and establish all the infrastructure and services necessary to support the mine site.

The cost estimate covers the direct cost of equipment, materials and labour for the construction of the facilities, underground infrastructure, underground mine development, cement plant, ore processing plant, tailings disposal and site infrastructure. It also includes the indirect costs such as freight, temporary power, water and communications, permits, engineering, procurement and construction management, training, lodging of construction workers, owner's costs, contingency and commissioning.

The estimate for the construction of the headframe and supply of hoist was derived from actual quotations from reputable companies. The estimated cost of the shaft sinking and related infrastructure was based on current quotations received at the end of November 2004. Quotations were received for most of the major mine and process equipment. The costs for the underground development were based on pricing provided by Aurizon for actual on-going contractual work. In the estimation of an all-inclusive labour rate, Met-Chem has established a rate of \$ 100 per hour for all surface construction work based on the Quebec Construction Decree. For underground construction work, Met-Chem has based its estimate on hourly rate of \$50 per hour based on current Aurizon contracts.

Indirect costs are based on generally applied factors for this type of work. Contingency was based on how the estimate was derived and averages 10%.

All capital cost estimates are expressed in Canadian Dollars.

## 17.0 OPERATING COST ESTIMATE

### Manpower

The total manpower workforce is established to cover a mine operation of 2400 tonnes per day including the staff and hourly employees. The Casa Berardi mine will require 200 employees hired by the company. This number does not include the workforce provided by contractors or agencies required for the underground development, the underground diamond drilling and site security. A summary of the workforce is shown in Table T-10:

**Table T-10 – Workforce Summary**

Description	Staff	Hourly	Total
Underground Mine	17	80	97
Mill	4	29	33
Maintenance	5	32	37
Technical Services	18	0	18
Administration (Mgt, HR, Saf., Pur.)	15	0	15
<b>TOTAL</b>	<b>59</b>	<b>141</b>	<b>200</b>

Operating practices, working conditions, wages rates, salaries and fringe benefits have been based on Aurizon's data from Casa Berardi and from their work on a similar operation in the Province of Quebec.

The staff personnel salaries are based on the actual payroll of Aurizon Mines ltd and the industry average. The fringe benefits are taken from Aurizon staff benefits program put in place in July 2004 and represent 57.25% of the basic employee salary.

The hourly rates for mine operation, maintenance and electrical, mill and laboratory employees are based on hourly rates negotiated in the union collective agreement in force at the closure of the mine in 1997. Those rates were updated with the CPI index to get new rates for year 2004 for each category of employee. A production bonus for underground employees and the fringe benefits were added to the new hourly rates to compose the annual salaries.

The hourly rates vary from \$18.35 to \$25.84 per hour as per the classification of labour categories. The fringe benefits are calculated on the hourly rates and represent 43% to 52% of the basic salary as per Aurizon hourly benefits program applicable for hourly employees. The annual cost of salaries and fringe benefits represents \$20.9 Million for all employees.

### Summary of Operating Costs

The average operating cost over the life of the Project are summarised in Table T-11.

**Table T-11 – Operating Cost Summary**

Description	\$/Tonne Milled
Underground Operating Costs	30.59
Milling Costs	13.30
Administration, Technical and Others Costs	10.00
Site Restoration and Mine Closure	0.42
<b>TOTAL</b>	<b>54.31</b>

### Underground Operating Costs

The underground operating costs include the stope preparation development, the mining operation, the maintenance and services to produce the annual tonnage and feed the processing plant. The operating costs are summarised in Table T-12 as follow:

**Table T-12 – Operating Costs – Underground**

Operating Costs – Underground	Cost (\$)	
	Per year	Per Milled Tons
Stope Preparation	3,952,228	3.75
Stoping	4,251,975	4.99
Hoisting	2,162,472	2.60
Mine Equipment Leasing	2,246,075	2.84
Services	2,226,954	2.63
Maintenance (manpower & parts)	4,049,539	4.64
Energy	3,237,192	3.96
Cemented Backfill	1,931,170	2.61
Supervision, training and absenteeism	2,095,031	2.58
<b>U/G TOTAL OPERATING COSTS</b>	<b>26,152,636</b>	<b>30.59</b>

The underground operating costs are based mainly on quotations prices received from mining contractors, equipments suppliers, or furniture suppliers for all specifics items. The manpower cost included in the operating cost are calculated with performances per manshift applicable to each task in reference to the industry average.

### Ore Processing Plant Operating Cost

At the start-up of production and for a 6-month period, the processing plant will operate at 1800 tpd. This will translate in a higher operating cost. After that initial period, it is foreseen that the process plant will operate at the target capacity of 2400 tpd. Table T-13 summarises the mill operating costs at 1800 and 2400 tpd.

Table T-13 – Operating Costs – Ore Processing

	2400 tpd		1800 tpd	
	\$/ton	\$/year	\$/ton	\$/year
<b>Salaries</b>				
Mill Staff	0.38	312,226	0.50	312,226
Hourly employees	2.06	1,709,649	2.75	1,709,649
Lab employees 30 % (including staff)	0.10	82,773	0.13	82,773
<b>Total salaries</b>	<b>2.54</b>	<b>2,104,648</b>	<b>3.39</b>	<b>2,104,648</b>
<b>Reagents</b>				
Cyanide	1.470	1,217,009	1.550	962,392
SO <sub>2</sub>	0.423	350,492	0.423	262,882
Lead Nitrate	0.416	344,065	0.416	258,048
Hydrated Lime	0.120	99,112	0.120	74,357
Quick lime	0.183	151,400	0.191	118,517
Copper Sulfate	0.215	177,606	0.214	133,124
Activated Carbon	0.151	125,013	0.151	93,760
Sodium Hydroxide	0.093	76,753	0.093	57,565
Flocculant	0.045	37,260	0.045	27,945
Others	0.148	122,576	0.148	91,932
<b>Total reagents</b>	<b>3.26</b>	<b>2,701,285</b>	<b>3.35</b>	<b>2,080,522</b>
<b>Grinding media and liners</b>				
SAG balls	0.88	730,659	0.88	547,994
Ball mill balls	1.05	872,269	1.05	654,202
SAG Liners	0.71	590,000	0.71	442,500
Ball mill Liners	0.05	42,500	0.05	31,875
Crushers liners	0.05	37,946	0.05	28,460
<b>Total liners and grinding media</b>	<b>2.75</b>	<b>2,273,374</b>	<b>2.75</b>	<b>1,705,031</b>
<b>Energy</b>	<b>2.33</b>	<b>1,930,442</b>	<b>2.33</b>	<b>1,446,930</b>
Laboratory supply mill (30%)	0.03	27,591	0.04	27,591
Refining Royal Mint	0.30	248,898	0.30	186,674
Transportation of gold bricks	0.13	109,455	0.16	100,853
Mechanical supply	1.61	1,329,554	2.14	1,329,554
Other operating cost	0.24	200,000	0.32	200,000
<b>Total operating cost</b>	<b>13.19</b>	<b>10,925,247</b>	<b>14.79</b>	<b>9,181,802</b>

The processing plant operating costs include the crushing, the grinding, the carbon and pulp process, the gold refinery, the energy, the maintenance and the mill laboratory as services to the mill operation.

The total unit operating cost at 2400 tpd is \$13.19/tonne.

The reagent component of the processing plant operating costs is based on historical data consumption for a similar type of ore and adjusted in some case with the results of metallurgical testwork done on ore samples from Zone 113 and Lower Inter Zone.

The crushing, grinding media, and energy costs are calculated to reflect the increase in the daily tonnage after the improvement is done in the mill.



### Electrical Power Cost

The total cost of electrical power was calculated for the entire operation and is split between the processing plant, the mine and the others surface charges included in Administration costs.

The cost for the concentrator area was calculated using the existing single line diagrams, and the cost of power for the mine was based on the revised load list proposed by Met-Chem for the mining operation.

A total of 96,182,209 kilowatt-hours in electrical energy are required for the revised design of the mine and the concentrator on an annual basis. With a subscribed power of 13,200 kilowatt, the annual cost of electrical power for the complex is estimated at \$3,906,206 based on the Hydro Quebec "Tarif L" price schedule effective April 1<sup>st</sup>, 2004. This cost has been distributed between the Underground Mine (46%), the Ore Processing Plant (49%) and Administration Operation costs (5%).

### Administration, Technical Services, and Other Costs

The Administration, Technical Services and Other Costs (ATS &O) include all those site operating costs not already covered in the Underground and Ore Processing Plant costs. The costs were generally derived from information, preliminary budget and internal studies supplied by Aurizon. Salaries are essentially based on current staffing as well as forecasted staffing during full mine operation. Material and services costs were estimated from existing costs, from previous studies and from equivalent costs for previous years operation at Casa Berardi. ATS &O costs are essentially regrouped as per the existing accounting costs centers established by Aurizon for Casa Berardi.

A summary of the annual costs is found in Table T-14.

**Table T-14** – Annual Costs for Administration,  
Technical Services and Other Costs

Department	Salaries (\$)	Material and Services (\$)	Total (\$)
<b>Administration</b>	1,104,040	3,233,600	4,337,640
<b>Technical Services</b>	1,536,458	314,379	1,850,837
<b>Other Costs</b>	444,992	1,450,534	1,895,526
<b>TOTAL</b>	<b>3,085,490</b>	<b>4,998,513</b>	<b>8,084,003</b>

### Site Restoration and Mine Closure

The site rehabilitation plan for Casa Berardi East and West sites was approved by the Ministry of Natural Resources on May 8, 2000. At the time, a financial guarantee covering 70% of the restoration cost was determined to be \$555,000. That amount was reviewed to \$1,209,789 to include the rehabilitation cost of the cell #4 and new five (5) hectares area required to store

additional waste rock for which Aurizon Mines received approval to include in the rehabilitation plan on April 11, 2003.

According to the "Guidelines for preparing a mining site rehabilitation plan and general mining site rehabilitation requirements" published by the Ministry of Natural Resources, Fauna and Parks, a financial guarantee covering 70% of the \$1,209,789 restoration costs will have to be set aside by Aurizon Mines. The 70% guarantee or \$847,000 will be allocated as shown in Table T-15 for the seven (7) years of the project. For the purpose of the present schedule, 2005 has been assumed to be Year 0.

**Table T-15 – Site Restoration – Schedule of Annual Payments**

Year	% of the guarantee	Guarantee payments (\$)
0	-	-
1	4	33,880
2	12	101,640
3	20	169,400
4	28	237,160
5	36	304,920
6	-	-
TOTAL	100	847,000

In addition to the Guarantee payments shown above, a lump sum amount of \$1,000,000 is allocated for the last year of operation to cover for the remaining portion of the restoration costs as well as for any other rehabilitation costs.

The total site restoration cost over the anticipated life of the Project corresponds to \$0.42/tonne milled.

## 18.0 FINANCIAL ANALYSIS

### General and Criteria

This section describes the method of analysis, basic assumptions and findings of the construction and operation viability assessment for the Casa Berardi project. The analysis was performed using estimates of capital and operating costs and estimated construction and production schedules as set out in preceding sections of this report.

In the process of performing the financial analysis, a financial model was constructed with Microsoft Excel software and took into account all of the estimates and assumptions of the current and previous sections. The model's output is a series of tables presenting Income and Cash Flow Statements for the Casa Berardi project. The Internal Rate of Return (IRR) was calculated according to the discounted cash flow methodology, and sensitivity analysis was also undertaken. The financial model is based on an 18 months (1.5 years) construction (pre-production) period followed by 66 months (5.5 years) of production.

All amounts in the current section, tables and figures are in constant Canadian dollars except where noted as USD.

### Revenues

Details on tonnages milled and revenues generated from the troy ounces of gold and silver produced can be found in Table T-16. The price of gold was subject to major variation and increase in the last year with a spot price ranging between US \$410 and US \$450 on the major stock exchanges. At the same time, the exchange rate between the Canadian and US currencies fluctuated substantially in favour of the Canadian dollar, going from 1.3000 CND/USD one year ago to 1.1850 CND/USD in December 2004. The monthly average over two years of the price of gold in Canadian dollars on the London Stock Exchange is \$500 per troy ounce. To reflect this price, a combination of gold price of US \$400 per troy ounce and exchange rate of 1.25 CND/USD was selected to be used in the financial model to compensate for the major variation in the price of gold and exchange rate. Figure F-7 shows market information on gold and silver price as well as CND/USD exchange rate.

For the purpose of the financial analysis, no inflation was applied to the current price.

Table T-16 – Financial Tables

Period	Preproduction		Production							TOTAL	
	Year 0	Year 1 First Half	Year 1 Second Half	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7		
Daily Production (Average)			1,800	2,400	2,400	2,400	2,400	2,400	2,400	0	
<b>Revenues</b>											
Mine Development (tonnes)	8.051	29.503	43,414	73,913	46,647	38,441	31,994	0	0	0	271,963
Mine Production (tonnes)			229,531	754,088	781,352	789,569	796,007	643,537	0	0	3,994,074
From stockpile			37,554	0	0	0	0	89,040	0	0	126,594
<b>Total (tonnes)</b>			310,499	828,001	827,999	828,000	828,001	732,577	0	0	4,355,077
Grade (g/t)	10.45	7.81	7.73	6.84	6.50	6.15	5.66	5.06	0	0	6.21
Tons Milled (tonnes)			310,499	828,001	827,999	828,000	828,001	732,577	0	0	4,355,077
Recovery Yield (%)			95.0%	93.7%	93.3%	92.9%	92.4%	92.1%	0.0%	0.0%	806,444
Au Recovered (troy ounces)			73,308	170,615	161,442	152,094	139,223	109,763	0	0	806,444
Less ounces in circuit (troy ounces)			-2,400	-850	-850	-850	-850	-850	0	0	0
Net Au Recovered (troy ounces)			70,908	169,765	160,592	151,244	138,373	115,563	0	0	806,444
Net Ag Recovered (troy ounces)			18,909	45,271	42,824	40,332	38,899	30,817	0	0	215,052
<b>Gross Income</b>			<b>35,454,226 \$</b>	<b>84,882,516 \$</b>	<b>80,295,818 \$</b>	<b>75,621,969 \$</b>	<b>69,186,342 \$</b>	<b>57,781,272 \$</b>	<b>403,222,143 \$</b>	<b>1,747,296 \$</b>	<b>404,969,439 \$</b>
			153,635 \$	367,824 \$	347,949 \$	327,695 \$	299,807 \$	250,386 \$	- \$	- \$	1,747,296 \$
			35,607,860 \$	85,250,340 \$	80,643,767 \$	75,949,664 \$	69,486,149 \$	58,031,658 \$	404,969,439 \$	- \$	404,969,439 \$
<b>Operating Costs</b>											
Mine Production cost (\$ per tonne milled)			38.92 \$	32.17 \$	31.59 \$	29.92 \$	29.70 \$	26.73 \$	- \$	- \$	30.59 \$
Mine Production cost (\$)			11,463,623 \$	26,630,792 \$	26,156,488 \$	24,773,760 \$	24,591,630 \$	19,581,783 \$	- \$	- \$	133,204,077 \$
Milling Costs (\$ per tonne milled)			14.79 \$	13.19 \$	13.19 \$	13.19 \$	13.19 \$	13.19 \$	- \$	- \$	13.30 \$
Milling Costs (\$)			4,892,280 \$	10,821,333 \$	10,821,333 \$	10,821,333 \$	10,821,333 \$	9,662,691 \$	- \$	- \$	57,940,264 \$
Administration & Others (\$)			4,042,000 \$	8,084,000 \$	8,084,000 \$	8,084,000 \$	8,084,000 \$	7,152,400 \$	- \$	- \$	43,330,400 \$
Administration & Others (\$ per unit)			13.02 \$	9.76 \$	9.76 \$	9.76 \$	9.76 \$	9.76 \$	- \$	- \$	10.00 \$
Site Restoration (\$)			33,880 \$	101,940 \$	189,400 \$	237,160 \$	304,560 \$	1,000,000 \$	- \$	- \$	1,847,000 \$
<b>Total Operating Costs</b>			<b>20,131,783 \$</b>	<b>45,743,765 \$</b>	<b>45,331,195 \$</b>	<b>44,016,240 \$</b>	<b>43,901,883 \$</b>	<b>37,396,874 \$</b>	<b>236,521,741 \$</b>	<b>54.31 \$</b>	<b>236,521,741 \$</b>
Operation Cost per tonne milled			64.84 \$	55.26 \$	54.75 \$	53.16 \$	53.02 \$	51.05 \$	- \$	- \$	54.31 \$
Operation Cost per Troy Ounce			284 \$	269 \$	282 \$	291 \$	317 \$	324 \$	- \$	- \$	293 \$
<b>Cash Flow from Operations</b>			<b>15,476,077 \$</b>	<b>39,506,575 \$</b>	<b>35,312,571 \$</b>	<b>31,933,424 \$</b>	<b>25,584,267 \$</b>	<b>20,634,784 \$</b>	<b>168,447,698 \$</b>	<b>- \$</b>	<b>168,447,698 \$</b>
<b>Capital Expenditures</b>											
Development (\$)	9,034,575 \$	10,620,835 \$	7,847,272 \$	6,880,053 \$	7,560,479 \$	7,730,188 \$	1,770,352 \$	- \$	- \$	- \$	51,443,754 \$
Fixed Investment Costs (\$)	35,818,893 \$	10,861,313 \$	500,000 \$	2,000,000 \$	3,800,000 \$	500,000 \$	500,000 \$	(5,300,000) \$	- \$	- \$	48,680,206 \$
Indirect Costs (Preproduction) (\$)	7,471,807 \$	3,569,608 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	11,041,415 \$
Contingency (\$)	4,195,064 \$	2,571,168 \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	6,766,232 \$
<b>CAPEX</b>	<b>84,143,263.00 \$</b>	<b>25,562,924.00 \$</b>	<b>8,347,272 \$</b>	<b>8,880,053 \$</b>	<b>11,360,479 \$</b>	<b>8,230,188 \$</b>	<b>2,270,352 \$</b>	<b>(5,300,000) \$</b>	<b>117,931,607 \$</b>	<b>- \$</b>	<b>117,931,607 \$</b>
<b>Financing Expenses</b>											
Loan Reimbursement (\$)	- \$	- \$	- \$	- \$	600,000 \$	600,000 \$	800,000 \$	- \$	- \$	- \$	2,000,000 \$
Previous Loan Reimbursement (\$)	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$
<b>Free Cash Flow before Taxes</b>	<b>(56,520,339) \$</b>	<b>(27,622,924) \$</b>	<b>7,128,805 \$</b>	<b>30,626,522 \$</b>	<b>23,352,095 \$</b>	<b>23,103,236 \$</b>	<b>22,515,915 \$</b>	<b>25,934,784 \$</b>	<b>48,516,091 \$</b>	<b>- \$</b>	<b>48,516,091 \$</b>
<b>Cumulative Free Cash Flow</b>	<b>(56,520,339) \$</b>	<b>(84,143,263) \$</b>	<b>(77,014,458) \$</b>	<b>(46,387,936) \$</b>	<b>(23,035,843) \$</b>	<b>67,993 \$</b>	<b>22,581,307 \$</b>	<b>48,516,091 \$</b>	<b>17,050,468 \$</b>	<b>- \$</b>	<b>21,264,379 \$</b>
NPV			6,555,223 \$	26,862,076 \$	19,745,461 \$	17,963,254 \$	16,056,583 \$	11,041,415 \$	6,766,232 \$	- \$	67,993 \$



Appendix 5. Prospectors and Developers leaflet on Super Flow Through Shares

“Super” Flow-Through Shares

After-Tax Cost of a \$1,000 Investment by an Individual Investor by Province in 2006  
(based on existing and proposed legislation, as well as administrative positions, as of June 30, 2006)

Notes	Quebec	B.C.	Manitoba	Ontario	Mild. & Labrador	Nova Scotia	P.E.I.	New Brunswick	Sask. (Note 7)	Northwest Territories	Yukon	Nunavut	Alta.
Combined federal/provincial tax rate – 2006 and 2007	48.22%	43.70%	46.40%	46.41%	48.64%	48.25%	47.37%	48.64%	44.00%	43.05%	42.40%	40.50%	38.00%
Federal tax rate – 2006	24.22%	29.00%	29.00%	29.00%	29.00%	29.00%	29.00%	29.00%	29.00%	29.00%	29.00%	29.00%	29.00%
Provincial tax rate – 2006	24.00%	14.70%	17.40%	17.41%	19.64%	19.25%	18.37%	17.84%	15.00%	14.05%	13.40%	11.50%	10.00%
Federal tax credit	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Provincial tax credit	-	20%	10%	5%	-	-	-	-	-	-	-	-	-
Amount of investment	\$ 1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Less: tax benefit of deduction of flow-through investment – federal	(242)	(290)	(290)	(290)	(290)	(290)	(290)	(290)	(290)	(290)	(290)	(290)	(290)
Less: tax benefit of deduction of flow-through investment – provincial	(360)	(147)	(174)	(174)	(196)	(193)	(184)	(178)	(150)	(141)	(134)	(115)	(100)
subtotal	(602)	(437)	(464)	(464)	(486)	(483)	(474)	(468)	(440)	(431)	(424)	(405)	(390)
Less: 15% non-refundable federal investment tax credit	(150)	(120)	(135)	(143)	(150)	(150)	(150)	(150)	(150)	(150)	(150)	(150)	(150)
Less: provincial tax credit	-	(200)	(100)	(50)	-	-	-	-	-	-	-	-	-
Add: income tax on inclusion of federal tax credit in 2007	36	52	63	66	73	72	71	70	66	65	64	61	59
Add: income tax on inclusion of provincial tax credit	-	87	46	23	-	-	-	-	-	-	-	-	-
	(716)	(618)	(590)	(588)	(583)	(561)	(553)	(548)	(524)	(516)	(510)	(494)	(481)
Net cost of \$1,000 investment in flow-through shares	(5)(6)	382	410	432	437	439	447	452	476	484	490	506	519

Notes

- (1) The federal government allows a credit of 15% of qualifying expenditures incurred (or deemed incurred under the "look-back" rule) before April 1, 2007.
- (2) The province of Quebec deduction is 15%, assuming expenditures are incurred after March 30, 2004.
- (3) Provincial tax credits reduce the amount of expenditures qualifying for the federal tax credit.
- (4) In the case of Quebec, the formula is "Gx8" since the federal investment tax credit is not taxed in Quebec.
- (5) Capital gains tax applicable when the shares are sold is ignored – the cost of the shares sold will be nil, therefore capital gains tax applies to 50% of the sales proceeds.
- (6) Alternative minimum tax is ignored in this analysis.
- (7) Saskatchewan officials have indicated that the province has decided not to continue its mineral exploration tax credit program for post-2006 expenditures.

Assumptions

- Taxpayers are subject to income taxes at top marginal rates.
- Canadian exploration expenses are 100% eligible for federal and provincial tax credits.
- Available tax deductions are taken in full.
- Exploration expenditures are made in the applicable province and the taxpayer is a resident of that province for tax purposes.

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