SOCIAL LICENSE TO OPERATE:
INTEGRATION INTO MINE PLANNING AND DEVELOPMENT

by

JACQUELINE LAURA NELEN

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ABSTRACT
This thesis is a compilation and analyses of research into Social License to Operate as applied to the mining industry. Mining companies have increasingly been criticized for their conduct, primarily as a result of high profile environmental mishaps, the cyclicality of the business (boom & bust) and the resultant socio-economic impacts resulting from mine closures. The purpose of this thesis is to advance the understanding of social license to operate, as well as assist the understanding of how it is acquired and maintained. The key aspects of the research relate to understanding several key issues: what is a social license to operate; how mining companies earn and maintain it; who gives a social license to operate; why a social license to operate is important and why companies are eager to obtain it; and how social license to operate principles are placed into practice. The research was based on an extensive literature review of both published and unpublished documents, as well as qualitative data from field studies and data from a social license survey conducted in 2005/2006.

This thesis presents key findings from an industry survey which was the starting point to identify what social license is, how it is earned, maintained and monitored at each phase of mine development. It also identified companies or projects recognized for being a role model for leading in the development of social license principles. The thesis reviews some of the identified companies in order to further elaborate on key aspects of social license. The thesis also explores Situational Analysis and its importance to social license to operate. A brief discussion also outlines the potential future use and benefits of social license as a Real Option to enhance project flexibility and assist in the decision making process with respect to the investment in a new mine.

The research led to the following conclusions:
1. Stakeholders are increasingly demanding a more participatory role in decisions affecting their neighborhoods and environments.
2. Social license is vital to ensuring business continuity and success, and provides a significant competitive advantage to those companies who have earned it.
3. Many companies have learned that voluntary initiatives beyond regulatory compliance are a key element to earning a social license.
4. Industry is generally well aware of the changing value systems surrounding mining, and
recognizes that project success is primarily based on stakeholder and economic approval.

5. Although there is a high level of awareness and a significant level of implementation with respect to social license, there is no real consensus with respect to the means and effectiveness of the implementation.

6. Project success appears to be based on building and maintaining sustainable relationships. A participatory approach with adaptive and co-management strategies appear to be fundamental to this success.

The key projects or mines identified by survey respondents as being role models for and/or leading in the development of social license are large, world leaders and internationally diversified, with the experience and financial resources dedicated to earning a social license. However, the data showed that small companies do have an almost equal opportunity to earn a social license as well as their larger peers.

Industry in general is becoming well aware of the need to earn community support to advance their projects. The use of situational analysis appears to be an effective tool to provide exploration and mining companies with the foundation from which to build a strategy for the acquisition of a social license. Social license forms the basis of ‘Reputational Capital’, thereby offering to reduce business risk and uncertainty, resulting in long-term stakeholder value.

This thesis indicates that there are three recommended tasks for further research. One is to further derive and test methodologies for quantitative and/or qualitative evaluation of social license. The second is to test situational analysis methods with more field case studies, and adapt them as necessary towards developing a scorecard methodology. The third is to characterize the transferability of social license, for example, from the target company to the acquiring company, following a merger or acquisition.
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DEDICATION

To my best friends,
Olav & Luke
1 INTRODUCTION

Social License to Operate (SLO) or Social License, within the context of corporate responsibility, competitive advantage and growth, is a new and emerging paradigm within the mining industry. Once camouflaged by concepts such as sustainable development and sustainability, social license is now in the forefront as ‘the language of choice’ by industry and stakeholders. It is a language whereby perspective is fundamental to its definition and purpose.

Social license is becoming the new ‘vision’ for companies to recognize and embrace in order to acquire economic certainty with respect to new projects, as well as build ‘reputational capital’ for future ones. At one point in time, commodity prices (economics) were the primary driver of mine construction. Now, social license adds an entirely new dimension: development acceptance by all stakeholders affected. If a community does not support the development of a mine, commodity prices, no matter how high, will not necessarily generate a positive production/development decision.

The concept of social license to operate has evolved over thousands of years, from societal shifts in values and from man’s awareness of his impact on the environment and the need to practice sustainable behavior in both ecologically, environmentally and socially.

Many mining companies have discovered that voluntary initiatives surpassing regulatory compliance result in less interference in their business practices by outsiders, and displayed to the public the seriousness of their efforts with respect to health and safety, diversity, and social/environmental responsibility. Ultimately, projects will no longer be built solely on the approval of regulatory permits/licenses rather they will be negotiated with stakeholders from an environmental and social perspective before entering the regulatory permitting process.
Social license is dynamic in nature, hence it requires renewal and re-evaluation at not only each phase of development, but over the entire life of the project. Social license must be flexible and be able to accommodate different social paradigms as cultures and societies evolve. For example, 20 years ago, employment opportunities were paramount and typically sufficient incentive to allow the development of projects. Project assessment evolved into demands for employment, training, environmental stewardship and social/infrastructure demands (hospitals, schools etc). Now all of these components tend to be considered, together with legacy benefits, such as small/medium size local businesses being able to survive independently post mine closure.

Social license has the connotation of being both tangible and intangible by nature. The title alone suggests intangibility because there is no actual license to be obtained. However; social license can be seen as either an option (a call) or as a type of insurance. For example, many projects are exposed to significant financial risk should stakeholders oppose or hamper production and development, particularly in the early project years prior to repayment of debt or the capital being repatriated. The investor seeks a reasonable return with a level of adequate security.

In order to acquire a social license, a mining company needs to have a planning process that enables an early, integrated and comprehensive analysis of the political, economic, social and technological factors that are likely to affect the potential project. A useful tool to focus on these factors is Situational Analysis - a process of examining and mapping a situation, its elements, and their relations, in order to acquire knowledge and understanding of the mine region (see Chapter 4). When incorporated into the mine planning process, it can help to formulate a strategy for gaining a social license suited to the particular situation. It provides us with the tools whereby the ‘situation’ becomes the focus of analysis. S.L Star (1989) states, “Scientific theories begin with situations....Theories are responses to the contingencies of these situations-courses of actions articulated with yet more courses of action. The theories that scientists form about nature are the actions that both meet specific contingencies and frame future solution”. Overall, situational analysis draws upon the micro- and macro-environment to develop a strategic direction for managing risk and making appropriate adjustments in planning decisions and actions, as well as interpret potential social-cultural changes resulting from its development. This process can be used by both industry and stakeholders to prepare for project negotiation. Situational Analysis is ‘the full situation of inquiry’, whereby we go beyond just ‘knowing the
subject’, to being fully situated. When incorporated into the mine planning process, it can help to formulate a strategy for gaining a Social License suited to the particular situation.

Acquiring a social license is proving to be a dynamic and evolving process whereby the interests of all stakeholders must be balanced at each phase of mine development, from grassroots exploration, to site remediation, to legacy sustainability projects. Situational analysis provides the initial framework from which to embark on the process of earning social license and ensuring that it is maintained to the benefit of all stakeholders.

1.1 Problem Statement
Mining companies have increasingly been scrutinized for their conduct at home and abroad in the context of corporate social responsibility. This, together with a long legacy of environmental mishaps, the cyclicality of the business combined with the relatively short life of most mines (depleting asset base), has led the industry to re-evaluate its position and contributions to economies, affected stakeholders and the environment. With the relatively recent coining of the term social license to operate, it became evident that research was needed to be conducted to assist in understanding social license and those key issues affecting mine planning and development.

1.2 Purpose and Objectives
Because social license has become an important tool for project success in the mining industry, the aim of this thesis is to assist the reader in understanding social license to operate with the ultimate goal of assisting them in actually acquiring and ultimately maintaining it. Key tasks to achieve this goal are to:

1. characterize what social license to operate is;
2. establish how companies earn it and maintain it;
3. establish who gives a social license to operate;
4. establish why a social license to operate is important and why companies are eager to obtain it; and,
5. define how social license to operate principles may be integrated into mine planning and development practice.
1.3 Methods
Most of the research for this thesis has been undertaken through an extensive literature review of both published and unpublished documents. The literature includes historical data from around the world; government and corporate statistics; environmental and social impact assessments; NGO, corporate and association reports; financial planning and development theories, and numerous other documents. Data was also obtained from field studies and practical project experience from working with a Vancouver-based, international gold mining company Placer Dome Inc (now Barrick Gold Corporation) during the research. The final product of that work experience was an extensive report, completed in 2006; entitled Building Social License with Exploration. Because exploration is the first point of contact between a company and its target environment (both social, economic, and ecological), the importance of minimizing the social and environmental footprint of that first contact is paramount. It is also particularly important to minimize the social and environmental ‘footprint’ or legacy once the exploration phase has ended. The report was a guide for geologists and management when making contact with communities worldwide on the socialization process. It provides the user with the tools to evaluate what, where, why and how to research exploration target areas (ETA) prior to contact, and where, when and how to make contact, communicate and engage communities, as well as when to seek help from a specialist.

The remainder of the research data was obtained from information acquired from a social license survey conducted in 2005/2006, as well as research into Real Options Theory. The survey was given to industry participants in order to acquire knowledge on stakeholder perceptions of what a social license is, how it is earned, maintained and monitored at each phase of exploration and mine development, and to identify companies and/or projects that have or are perceived as leaders with respect to earning a social license. In a sense, the survey was an “opinion poll” to try to gain an understanding of industry awareness and perceived needs and to facilitate further research into social license to operate.

1.4 Thesis Structure
The first chapter highlights why companies need or want a social license. It also states the purpose and objectives of the thesis, and describes the methodology adopted to achieve these objectives. Chapter 2 identifies knowledge obtained from an industry survey on social license to
operate. The survey was the starting point on identifying what social license is, how it is earned, maintained and monitored at each phase of exploration and mine development, and to identify companies and/or projects that have or are on their way to earning a social license. Chapter 3 reviews (Tambogrande Mine, Yanacocha Mine, Misima Mine, Project X, Pogo Project, Eagle Rock Quarry Project, Wallaby Project, Las Cristinas Gold Mine, Red Dog Mine, Galore Creek Gold Project, Ekati Diamond Mine, Diavik Diamond Mines, Snap Lake Diamond Project and OK Tedi Mine) case studies involving both successful and stalled or halted projects. The analysis of real life, relatively current successes and failures provides many insights into key success factors and the expectations of stakeholders in granting a social license. Key factors are extracted and highlighted from each case study. Chapter 4 analyses, discusses and applies all of the qualitative and quantitative data. This chapter provides highlights of the exploration guideline developed for Placer Dome in 2006, and presents the concept of situational analysis – a process of examining and mapping a situation, its elements and their relations - in order to acquire knowledge and understanding of a project, locale and region. Chapter 5 summarizes the need for a social license, how to earn a social license and the limits of a social license. It also introduces and briefly discusses the concept of Real Options Theory, in particular how social license might be viewed as an option with respect to the investment decision process by increasing project flexibility. It illustrates how social license to operate can be viewed as a real option with respect to a company’s choice to exercise it at varying levels of cost (investment into a social license to operate program) to realize potential future value from its exercise. Chapter 6 reviews the main conclusions covered throughout the thesis, as well as recommendations for future work.
2 SOCIAL LICENSE TO OPERATE: AN INDUSTRY SURVEY

In order to acquire knowledge of industry stakeholder perceptions of what social license is, how it is earned, maintained and monitored, a social license survey was distributed in 2005/2006. This was undertaken with the collaboration of various industry organizations: to members of the Association for Mineral Exploration British Columbia (AME BC), Society of Mining Engineers (SME), INFOMINE, Prospectors and Developers Association of Canada (PDAC), Mineral Exploration Group (MEG), Canadian Institute of Mining, Metallurgy and Petroleum (CIM), and Mining Association of British Columbia (MAC). The survey was distributed in conference delegate bags (AME BC Conference), through websites (SME, CIM, INFOMINE), via email and at a luncheon (MEG). The intent of the survey was in a sense an industry “opinion poll” to try to gain an understanding of social license to operate in the context of the mining industry.

2.1 Construction of the Social License to Operate Survey

The primary method of research to prepare for the social license survey in 2004 was an extensive literature review, whereby over one hundred documents and internet sites had phrases such as “license to operate,” “social license to operate,” and/or “social license” were found and reviewed. In comparison to today, there were very few people and/or associations discussing the concept of social license to operate in 2004. Despite over one thousand documents and internet sites containing these phrases today, very few academics have written on and/or made reference to social license to operate. Social license to operate is a relatively new term that has tended to be formalized outside of academia by members from resources industries such as mining and forestry (James 2000; Gunningham et al 2002; Lassonde 2003; Yearly 2003; Hilson and Haselip 2003; Gunningham et al 2004).

Other topics explored in order to design the survey were concepts related to Sustainable Development, Sustainability, Corporate Social Responsibility, Towards Sustainable Mining, and Triple Bottom Line. Information on case studies was also collected and analyzed, including Ok Tedi, Omai Gold Mine, Kumtor Mine, Baie Mare, Yanacocha, Tambogrande, Esquel Project, Ovacik, Pogo Project, Red Dog Mine, Eagle Rock Project (see case study details in Chapter 3).

Consultation with academic and industry personnel, as well as research into survey design also determined the outline, design and content of the survey (Groves et al 2004; Biemer et al 1991;
Hayes 1997; Scoble 2005). The survey consists of four sections titled: “what is social license?”, “respondent information”, “how do we acquire a social license” and “the way forward”. Each section was designed to acquire knowledge on industry’s perceptions on different perspectives of social license to operate.

The first section of the survey was designed to gauge the respondents’ knowledge of social license. It contained eight questions, whereby respondents were asked to rate definitions of social license, as well as identify companies or jurisdictions they believed were leaders in the development and application of social license to operate principles.

The second section was designed to gain information on the respondents themselves. It contained five questions, of which three were optional. This section was important because it allowed the type and size of companies the respondents were affiliated with to be determined, allowing for comparative studies (e.g., what type of company is more familiar with social license). It also allowed for some consideration of potential bias in the survey (e.g., did respondents vote for the mines they are affiliated with as role models for social license?).

The third section contained only one question (Q# 14) and was designed to determine how companies could acquire a social license from an industry perspective. The respondents had to value (10 = very important to 1 = not important) seventeen statements on how to acquire a social license. For example, the highest and lowest rated statements respectively were as follows:

1. Understanding culture, customs, language and history; and,

17. Reference to existing reference material, e.g., Output from the MMSD initiative.

The last section of the survey contained six questions. The answers to these questions would help to determine the way forward for social license practice and social license research. For example, the respondents voted on who determines if a social license has been obtained, and how would a company know if they have obtained it. There was also a question asking respondents to acknowledge any mining companies or projects they thought would be a good role model for social license. This question was fundamental in determining case studies for future analysis. Sections one and four provided the basis for this analysis; hence certain projects have been highlighted in Chapter 3.
2.2 Social License to Operate Survey Results

The survey results are a compilation of industry perceptions. One hundred and fifty-two surveys were returned and analyzed as part of this research. Results have been presented through some preliminary papers and presentations to industry (Nelsen and Scoble 2005, 2006, and 2007). Also, interest in this approach has been shown by the BC Government’s Ministry of Energy, Mines and Petroleum Resources (MEMPR). Workshops based on the research were presented to both mining and oil-gas groups in MEMPR in 2005 and 2007.

2.2.1 What is a social license?

There are many different ideas of what social license is. Defining it has posed a problem for many throughout the mining industry. In fact, social license has been expressed by many as a compilation of methods, rather than by a static definition. For instance, Pierre Lassonde (former CEO, Newmont Mining Corporation) drew attention to the observation that “Without local community support, your project is going nowhere” (Lassonde 2003a: 7). He described social license as “…the acceptance and belief by society, and specifically our local communities, in the value creation of our activities, such as we are allowed to access and extract mineral resources (Lassonde 2003a: 9). He continues by stating, “You don’t get your social licence by going to a government ministry and making an application or simply paying a fee. … It requires far more than money to truly become part of the communities in which you operate” (Lassonde 2003a: 10). Gunningham et al (2002: 10) from the Center for the Study of Law and Society Jurisprudence and Social Policy states, “The social license, then, is based not on compliance with legal requirements (although breach of these requirements may jeopardize the social license) but rather upon the degree to which a corporation and its activities are accepted by local communities, the wider society, and various constituent groups”. Larry Kurlander (former Executive VP, Newmont Mining Corporation) states in a televised PBS Documentary (Frontline/World) entitled The Curse of the Inca Gold (2005) that, “There is a Social License, that in my opinion, it is far more important than a Government License. It is renewable everyday! Without building a trust with the people that live there and work there and have lived there for centuries, you are going to have trouble and indeed they [Newmont] have” (Bergman 2005). In 2005, Newmont Mining Corporation’s website defined social license to operate as:

...the informal and formal approval a company needs from stakeholders to conduct its business. It requires a company to develop on-going, positive relationships with its stakeholders in order to obtain support from people likely to be affected by the
company’s activities, to operate in their community. A company’s performance in the areas of safety, social and environmental management is critical to gaining and retaining this ‘social license’, and in doing so, the company is better positioned to gain access to new resources, receive regulatory approval to operate, attract higher-quality employees and enjoy support from a wider range of stakeholders (Newmont 2005).

Patrick James (former President and CEO of Rio Algom) has been credited by many in the mining industry as the person who coined the term social license to operate. Although it can neither be confirmed nor denied; an extensive literature research discovered that he is one of the first in the resource industry to discuss this term. His work on this issue dates back to the year 1999. In 2000, he stated (p. 8), “Obviously a Social Licence is not obtained from the courthouse. It is earned from the people of the community, the stakeholders of the project. It is not written on paper, but you can see it in peoples’ faces when they talk about the development. It is about mutual respect, shared benefits, common trust”. Overall, social license to operate addresses the relationship between a mine and its affected communities through the perceptions created by an effective consultation and participation process. Social license is in fact defined by its success, specific to project, location, over time, and as a compilation of methods and ideals. D.C. Yearly states (2003), “The executives of multinational mining companies repeatedly contend that the success of a project is contingent upon securing a ‘social license to operate’”.

The first section of the survey comprised eight questions. Each question was designed to obtain information on the respondents’ familiarity and comprehension of what social license is.

Question 1: Are you familiar with the term social license?

Seventy-eight percent of the respondents were familiar with the term social license. This suggests a very high level of awareness of the term, but does not lead to a conclusive determination of what it is. As discussed, there would appear to be a range of interpretations or potential definitions of social license.

Question 2: At the 2003 Cordilleran Round-up Pierre Lassonde1 described social license as “...the acceptance and belief by society, and specifically our local communities, in the value creation of our activities, such as we are allowed to access and extract mineral resources.” Do you agree with the above statement?

Eighty-one percent of the respondents agreed or strongly agreed with Lassonde’s statement.

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1 (Lassonde 2003a: 9)
It appears that there is strong support for the concept that it is the "value creation of our activities" beyond the mining operation itself within which respondents associate the term social license. In other words, social license is widely conceived to encompass more than simply the creation of employment. The implication from research of recent projects is that social license relates importantly to legacy issues whereby communities see the protection of the environment and their culture, while strengthening their long-term community capacity.

Research revealed that Lassonde was recognized by industry as strongly publicizing the notion of social license to operate, in conjunction with mining project success. A combination of factors makes his definition a good benchmark to acquire industry perspective on what is deemed to characterize social license to operate. These factors include: being the CEO of Newmont Mining Corporation, increased media coverage promoting the notion of social license to operate, as well as media coverage on recent Newmont projects/mines (e.g., Yanacocha, Ovacik), failing to acquire a social license.

Question 3: Social license has been identified as being intangible (not a piece of paper) or non-permanent (implying standards and renewal), but rather a measure of communities' ongoing acceptance of a company's activities. Do you agree with above statement?

Ninety-one percent of the respondents agreed or strongly agreed with the above statement defining social license.

Extensive research into the definition of social license allowed for the compilation of ideas into one statement on social license to operate, social license and/or license to operate. This definition encompasses ideas from statements expressed by industry members and academics defined in Section 2.2.1. This statement emphasizes concepts such as intangibility, renewal and standards; hence dynamic and renewable on a perpetual basis, whereby Lassonde's statement could be construed as static, and lacks the 'renewability' aspect implicitly stated in Question two.

Question 4: Are regional and/or local stakeholders important to acquiring a social license? Do you agree with the above statement?

Ninety percent of the respondents believe that both regional and local stakeholders are important in the acquisition of a social license.
Question 5: Are you currently using this terminology or its concepts in your organization?

Fifty-six percent of the respondents are using social license terminology or its concepts in their organization. This question illustrates that there is an awareness of social license or its concepts and the importance of their use in company practices, policies and mandates.

Question 6: Are you or your organization using an alternative or modified approach?

Forty-one percent of the respondents are using an alternative or modified approach.

Question 7: Would you be willing to explain further this alternative approach as a follow up?

Ninety-nine percent of the respondents who are using an alternative or modified approach to social license are willing to explain their alternative approach in future meetings or discussions.

This question illustrates that there is a great awareness and desire to understand social license by survey respondents. It also illustrates what would be a useful modification to the survey in the future, whereby a space is provided asking respondents to elaborate on alternative or modified approaches used in their organization. This will allow for further comparison studies, as well as provide more detail on practices used throughout industry. This will be increasingly valuable as different social responsibility approaches come into practice in mining.

Question 8: Please identify any jurisdictions and/or companies in the world that you consider to lead in the development and application of the social license or alternative concept?

Figure 2.1 illustrates the respondent’s identification of jurisdictions and/or companies in the world that lead in the development and application of social license or alternative concepts.

There appear to be many potential reasons as to why these particular companies are voted as leading in the development and application of social license. They include:

- The majority of the companies have been operating for over twenty years and are better known public companies in the mining industry.
- The majority of the companies have operating experience/expertise in countries with high geopolitical risk, hence giving them worldwide exposure.
• The majority of the companies have their headquarters located in Canada, hence are more recognized by Canadian and American survey respondents.
• The majority of the companies have market capitalization over US$10 Billion dollars; hence they have greater profile and capital resources.

The data from question eight will be examined further throughout this chapter, as well as in Chapter 3. The recent consolidation trend in the Canadian mining industry has resulted in the absorption of some of Canada's largest and best known mining companies such as Placer Dome Inc, Noranda, Inco and Falconbridge Ltd. As the consolidation wave is just over a year old, it was decided to keep the data in its original form in order to better evaluate the various perceptions of social license.

**Figure 2.1 Companies that lead in the development and application of SLO or alternative concept**
Conclusion

The results of the first section of the survey suggest a high level of awareness of social license, but there are significant differences in opinion on what it is. Over fifty percent of the respondents use some form or derivative of social license in their organizations. This generally supports the view that there is a higher level of awareness and a significant level of implementation already in place. It does not necessarily suggest that implementation is effective; rather respondents feel they have a system in place.

2.2.2 Survey Respondent Demographics

The second section of the survey consisted of five questions. Three of the questions were optional. Each question was designed to obtain information on the respondents themselves, in order to determine what type of bias is present in the survey, as well as how certain organizations/individuals voted.

Question 9: Name and contact information (Optional)

Forty-six percent of the respondents gave their name and contact information. For the purpose of confidentiality, the names and contact information of respondents cannot be displayed.

Question 10: Which organization do you represent? (Optional)

Fifty percent of the respondents gave the name of the organization they are affiliated with. The organizations are quite diversified in the sense that they represent Government (26%), Mining and Exploration Companies (43%), NGOs (5.6%), Aboriginal people (4.2%), Academic (8.5%), and Associations (8.5%) listed. For reasons of confidentiality, the names of these organizations cannot be displayed.

Question 11: What type of mineral development organization are you affiliated with?

Figure 2.2 illustrates the type of mineral development organizations the respondents are affiliated with, as well as the respondent distribution per category. Ninety-two percent of the respondents are affiliated with the top four organization types; producer, exploration, other and government. The other category contains organizations such as consulting companies, associations, and academic institutions.
The importance of knowing the type of organizations that respondents are affiliated with is the identification of how they voted throughout the survey. For example, Figure 2.3 illustrates the distribution of the survey respondents’ affiliation type and their familiarity with the term social license. The results are a somewhat evenly distributed pattern. There are no particular categories that stand-out as being familiar or not familiar with the term social license. Therefore, it can be concluded that the awareness of social license across various industry sectors is relatively consistent, and not skewed to one particular sector. It is difficult to determine if any bias exists in the data set, as there was not enough data available on the general population completing the survey. It should also be highlighted that the survey was voluntary. In other words, there is a strong likelihood that only participants with a strong interest in social license would take part.
Question 12: What size is the organization you are affiliated with?

Forty-two percent of the respondents are affiliated with an organization with more than five hundred employees, whereas thirty-eight percent are affiliated with an organization with less than one hundred employees. Seventeen percent of the survey respondents are affiliated with an organization with between one hundred and five hundred employees.

Although inconclusive, there is a strong possibility that this data is indicative of the general population involved in the mining industry. A majority of the respondents are either from single entrepreneurship firms (geologist/consultant) or from relatively large corporations. With respect to operating companies, those with one hundred to five hundred employees are likely to be single asset companies.

Question 13: What is your position and role in this organization? (Optional)

Figure 2.4 illustrates the distribution of position and role in an organization noted by
respondents. Forty-five percent of the respondents who responded to this optional question are in executive management positions (e.g., CEO, VP, Director, and Management). The second largest category is geologist with nineteen percent.

Figure 2.4 What is your position and role in this organization?

These statistics are important as they help to explain which industry participants are knowledgeable with respect to the term, and hence where further development may be required. For example, sixty-eight percent of the forty-five percent of survey respondents who responded to this question are in executive management positions; hence are familiar with the term social license. This would support the notion that many executive managers are actually more in touch with current paradigms than their field personnel. However, executives may have had a greater opportunity to complete the survey.

Conclusion

The results of the second section of the survey suggest that there is a strong interest in social license, as well as a strong interest to collaborate on future projects because approximately fifty
percent of the survey respondents gave personal information such as the company name they were affiliated with, their name and contact coordinates. Acquiring personal information also allows for the determination of bias as it pertains to the number of personnel who voted for their own company or project leading in the development of and/or a good role model for social license (see Questions 7 & 14). For example, only two (who filled in the optional section) out of nine people affiliated with Placer Dome Inc voted for Placer Dome Inc or for one of their projects in Question 7 or 14. The project in question, Musslewhite, is recognized by many in the industry for its initiatives with the Windigo, Cat Lake, Shibogama, North Caribou Lake, Kingfisher and Wunnum Lake Aboriginal peoples in the obtainment of a Socio/Economic Benefit Agreement (titled the Musslewhite Agreement) in 1996. The fact that Placer Dome (PDG) was headquartered in Vancouver (the primary location of the survey), resulted in 5.9% \(^2\) of the survey participants employed by PDG. Only two survey respondents from PDG voted for PDG or a PDG project. As mentioned above, the project in question has had a long industry reputation for sustainable development best practices, hence minimizing their bias. If a bias were to be assumed, the two votes would have to be treated as 100% biased, hence eliminating them from the total votes. However, Placer Dome would still remain the company with the highest votes for leading in the application and development of social license, as well as an industry role model for social license with the elimination of those two votes.

2.2.3 How do we acquire a social license?

The third section of the survey comprises of one question: Which of the following features do you think are important to any process for acquiring a social license? Respondents were asked to rate seventeen methods from one to ten as being very important with respect to the acquisition of a social license.

**Question 14:** Which of the following features do you think are important to any process for acquiring a social license?

Figure 2.5 illustrates the results by importance of what is required for a company to acquire a social license. The respondents had to value (10 = very important to 1 = not important) seventeen potential features of acquiring a social license. These features were established after careful and deliberate research into social license. For instance, a literature review,

\(^2\) Of the 152 survey respondents, 9 (known) are from PDG = 5.9%.
along with case study analysis, field experience and consultation with industry members and academics was conducted to design the seventeen statements, as well as their placement in the questionnaire.

As discussed throughout Section 2.2.1, social license is a process that is comprised of a range of components. It is unlikely that the process can be attributed to a constant and static definition. The methods for acquiring a social license listed in Figure 2.5 are a form of characterization; however each process feature may not be a single requirement for a social license. The features listed in Figure 2.5 are related and represent a multi-faceted process. Further discussion on how to earn a social license is centered on Chapters 4 and 5.

**Figure 2.5  How do we acquire a social license?**

<table>
<thead>
<tr>
<th>How do we acquire a Social License?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding culture, customs, language, history etc</td>
</tr>
<tr>
<td>Educating local stakeholders about the project</td>
</tr>
<tr>
<td>Ensuring open communication amongst all stakeholders</td>
</tr>
<tr>
<td>Maintaining a sound track record as a positive corporate reputation</td>
</tr>
<tr>
<td>Workforce training</td>
</tr>
<tr>
<td>Employing Innovation and Technology to avoid undue impacts</td>
</tr>
<tr>
<td>Community support and capacity building</td>
</tr>
<tr>
<td>Business partnership with communities for economic development</td>
</tr>
<tr>
<td>Enabling corporate transparency</td>
</tr>
<tr>
<td>Going beyond legal &amp; regulatory compliance</td>
</tr>
<tr>
<td>Collaboration with communities to help meet their infrastructure needs</td>
</tr>
<tr>
<td>Meeting sustainable development criteria</td>
</tr>
<tr>
<td>Responsible local stakeholder compensation</td>
</tr>
<tr>
<td>Partnering with NGO’s for assistance where necessary</td>
</tr>
<tr>
<td>Promoting a positive brand value as a corporate image</td>
</tr>
<tr>
<td>Reference to existing reference material</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

Table 2.1 illustrates the breakdown by industry respondent type on the order of importance of how to earn a social license. The respondents from an “Exploration” company voted their top three answers on how to earn a social license as being:

- Educating local stakeholders about the project;
- Maintaining a sound track record as a positive corporate reputation; and,
- Workforce training.

### Table 2.1 Analysis: How do we acquire a social license?

<table>
<thead>
<tr>
<th>#</th>
<th>How do we earn a SLO?</th>
<th>E</th>
<th>P</th>
<th>F</th>
<th>G</th>
<th>S</th>
<th>N</th>
<th>O</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Understanding culture, customs, language, history etc</td>
<td>239</td>
<td>290</td>
<td>19</td>
<td>204</td>
<td>8</td>
<td>40</td>
<td>210</td>
<td>1010</td>
</tr>
<tr>
<td>2</td>
<td>Educating local stakeholders about the project</td>
<td>253</td>
<td>286</td>
<td>20</td>
<td>214</td>
<td>6</td>
<td>29</td>
<td>202</td>
<td>1010</td>
</tr>
<tr>
<td>3</td>
<td>Ensuring open communication amongst all stakeholders</td>
<td>235</td>
<td>296</td>
<td>19</td>
<td>204</td>
<td>10</td>
<td>38</td>
<td>189</td>
<td>991</td>
</tr>
<tr>
<td>4</td>
<td>Maintaining a sound track record as a positive corporate reputation</td>
<td>252</td>
<td>272</td>
<td>20</td>
<td>195</td>
<td>6</td>
<td>37</td>
<td>181</td>
<td>963</td>
</tr>
<tr>
<td>5</td>
<td>Workforce training</td>
<td>242</td>
<td>245</td>
<td>17</td>
<td>166</td>
<td>7</td>
<td>26</td>
<td>209</td>
<td>912</td>
</tr>
<tr>
<td>6</td>
<td>Employing innovation and technology to avoid undue impacts</td>
<td>237</td>
<td>234</td>
<td>17</td>
<td>190</td>
<td>7</td>
<td>26</td>
<td>203</td>
<td>914</td>
</tr>
<tr>
<td>7</td>
<td>Community support and capacity building</td>
<td>213</td>
<td>258</td>
<td>18</td>
<td>183</td>
<td>10</td>
<td>26</td>
<td>190</td>
<td>898</td>
</tr>
<tr>
<td>8</td>
<td>Business partnership with communities for economic development</td>
<td>221</td>
<td>256</td>
<td>20</td>
<td>165</td>
<td>7</td>
<td>32</td>
<td>191</td>
<td>892</td>
</tr>
<tr>
<td>9</td>
<td>Enabling corporate transparency</td>
<td>196</td>
<td>259</td>
<td>17</td>
<td>185</td>
<td>10</td>
<td>40</td>
<td>181</td>
<td>888</td>
</tr>
<tr>
<td>10</td>
<td>Going beyond legal &amp; regulatory compliance</td>
<td>203</td>
<td>237</td>
<td>19</td>
<td>196</td>
<td>5</td>
<td>33</td>
<td>165</td>
<td>858</td>
</tr>
<tr>
<td>11</td>
<td>Collaboration with communities to help meet their infrastructure needs</td>
<td>188</td>
<td>249</td>
<td>19</td>
<td>168</td>
<td>6</td>
<td>34</td>
<td>193</td>
<td>857</td>
</tr>
<tr>
<td>12</td>
<td>Meeting sustainable development criteria</td>
<td>194</td>
<td>253</td>
<td>16</td>
<td>154</td>
<td>5</td>
<td>38</td>
<td>183</td>
<td>843</td>
</tr>
<tr>
<td>13</td>
<td>Responsible local stakeholder compensation</td>
<td>205</td>
<td>235</td>
<td>17</td>
<td>164</td>
<td>5</td>
<td>27</td>
<td>173</td>
<td>826</td>
</tr>
<tr>
<td>14</td>
<td>Partnering with NGO’s for assistance where necessary</td>
<td>138</td>
<td>221</td>
<td>17</td>
<td>137</td>
<td>5</td>
<td>38</td>
<td>149</td>
<td>705</td>
</tr>
<tr>
<td>15</td>
<td>Promoting a positive brand value as a corporate image</td>
<td>177</td>
<td>197</td>
<td>13</td>
<td>149</td>
<td>5</td>
<td>22</td>
<td>133</td>
<td>696</td>
</tr>
<tr>
<td>16</td>
<td>Reference to existing reference material (MMSD Initiatives)</td>
<td>129</td>
<td>160</td>
<td>9</td>
<td>119</td>
<td>8</td>
<td>12</td>
<td>135</td>
<td>572</td>
</tr>
<tr>
<td>17</td>
<td>Other</td>
<td>10</td>
<td>18</td>
<td>0</td>
<td>24</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>54</td>
</tr>
</tbody>
</table>

E = Exploration; P= Producer; F=Finance; G=Government; S=Supplier; N=NGO; O=Other; and, Total = the sum of all values voted for that statement. Values in statement box under each type of respondent are the total sums voted by the type of respondent (e.g., Exploration sum is 203 for statement A).

"Producers" voted for Ensuring open communication amongst all stakeholders as their top answer, whereby "NGOs" voted for Enabling corporate transparency and Understanding culture, customs, language, history etc as their top priorities. The respondents who listed their type of organization as "Other" voted for the following top three answers:

- Understanding culture, customs, language, history etc;
- Workforce training; and,
- Employing Innovation and Technology to avoid undue impacts.
By analyzing the groups in the “Other” category, the academics voted for *Educating local stakeholders* about the project as their top answer for acquiring a social license, whereby the consultants voted for Understanding culture, customs, language, history etc as their top answer. By looking at the distribution of answers on how to acquire a social license, allows for a better understanding of the dataset in the identification of group interests. The most frequent answer was *Understanding culture, customs, language, history etc*; however, *Enabling Corporate Transparency* was the least frequent, but the top answer for NGOs.

### 2.2.4 The Way Forward

The last section of the survey consisted of six questions. Each question was designed to obtain information on the way forward. In other words, how does a company determine if a social license has been obtained, and who determines if they have obtained it? Respondents also vote on who the industry role models are for social license.

**Question 15: How could a company determine if it has obtained a social license?**

Figure 2.6 illustrates the results of how respondents would measure or determine if a company obtained a social license. Nine measures were suggested and the respondents could choose as many of the nine measures as they wanted.

These measures were designed from an extensive literature review and case study analysis in 2004. As illustrated by the case studies discussed in Chapter 3, many of the key measures determining if a social license has been obtained are linked to measures for acquiring a social license. However, case study analysis illustrated that community surveys, letters of support and open houses are excellent indicators for whether a social license has been obtained by a company. If companies are ‘in tune’ with their stakeholders (such as community members) and are able to ‘hear and listen to’ their concerns they will be able to design a collaborative program towards a social license.

Figure 2.6 demonstrates that fifty-six percent of the one hundred and fifty-two respondents determined that the results of an overall community consultation program would decide if a company had obtained a social license. The industry examples listed in Section 2.2.3 on how to acquire a social license, as well as the case studies discussed in Chapter 3 illustrate that effective
and participatory consultation programs could lead to a social license, and project development.

**Figure 2.6  How could a company determine if it has obtained a social license?**

<table>
<thead>
<tr>
<th>How could a company determine if it has obtained a Social License?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results of Overall Community Consultation Program</td>
</tr>
<tr>
<td>Results of a Community Survey</td>
</tr>
<tr>
<td>Letters of Support from Community Leaders and Organizations</td>
</tr>
<tr>
<td>Receive a Government Permit</td>
</tr>
<tr>
<td>Outcome of Open Houses</td>
</tr>
<tr>
<td>Certification by an Accredited Third Party</td>
</tr>
<tr>
<td>Social License Scorecard</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Media Recognition</td>
</tr>
</tbody>
</table>

**Question 16**: Who needs to determine if a social license has been obtained?

Figure 2.7 illustrates the results on who needs to determine if a social license has been obtained. The survey respondents had the opportunity to choose (as many) from the following nine statements listed on Figure 2.7. Sixty-three percent of the one-hundred and fifty-two survey respondents believe that the company needs to determine if it has received a social license. The second highest ranked determinant is the community with fifty-seven percent of the votes.
Figure 2.7 Who needs to determine if a social license has been obtained?

<table>
<thead>
<tr>
<th>Who needs to determine if a Social License has been obtained?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
</tr>
<tr>
<td>Community</td>
</tr>
<tr>
<td>Local Government</td>
</tr>
<tr>
<td>Regional Government</td>
</tr>
<tr>
<td>Indigenous Peoples</td>
</tr>
<tr>
<td>Company Shareholders</td>
</tr>
<tr>
<td>National Government</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>International NGOs</td>
</tr>
</tbody>
</table>

Number of Respondent Votes

Question 17: Based on your knowledge of social license, please identify which mining company(s) and/or project(s) you would choose as a good role model for social license?

Figure 2.8 illustrates the respondent’s identification of companies (via project and company name) in the world that would be a good role model for social license.
There are many potential reasons as to why these particular companies/projects might have been voted as being role models for social license. They include:

- The majority of the companies have been operating for over twenty years and are better known public companies in the mining industry.
- The majority of the companies have operating experience/expertise in countries with high geopolitical risk, hence giving them worldwide exposure.
- The majority of the companies have their headquarters located in Canada, hence are more recognized by Canadian and American survey respondents.
- The majority of the companies have market capitalization over US$10 Billion dollars, hence greater profile, and capital resources.
- The majority of the recent projects (see Figure 2.13) involve Aboriginal peoples and participation agreements.
The data from Question 17 will be examined further throughout this chapter, as well as in Chapter 3. As discussed with reference to Question 8 it was decided to keep the data in its original form despite the recent consolidation trend in the Canadian mining industry, in order to better evaluate the various perceptions of social license. Of primary concern is the transferability of social license during these large corporate takeovers.

Since this question requests the identification of particular projects or mines, Table 2.2 illustrates the respondents' identification of projects/mines in the world that would be good role models for social license. Chapter 3 discusses results from case study analysis, whereby companies and/or projects are examined in further detail as to why they lead in the application and development, and/or good role models for social license.
<table>
<thead>
<tr>
<th>Company</th>
<th>Total Votes</th>
<th>Project &amp; Mine Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areva NC</td>
<td>1</td>
<td>AMOK Cluff Lake Mine (1)</td>
</tr>
<tr>
<td>Barrick Gold Corporation*</td>
<td>3</td>
<td>Pierina Gold Mine (1)</td>
</tr>
<tr>
<td>BHP Billiton</td>
<td>10</td>
<td>Ekati Mine (5), Tintaya Mine (2), Cannington Mine (1), Spence Mine (1), Escondida Mine (1)</td>
</tr>
<tr>
<td>Codelco – Corporation Nacional del Cobre</td>
<td>1</td>
<td>El Teniente Mine (1)</td>
</tr>
<tr>
<td>Continental Minerals Corporation</td>
<td>1</td>
<td>Xientangen Project (1)</td>
</tr>
<tr>
<td>Cumberland Resources</td>
<td>1</td>
<td>Meadowbank River (1)</td>
</tr>
<tr>
<td>DeBeers Consolidated Mines Ltd</td>
<td>2</td>
<td>Victor (1)</td>
</tr>
<tr>
<td>Falconbridge Ltd*</td>
<td>3</td>
<td>Raglan Mine (2)</td>
</tr>
<tr>
<td>IMA Exploration Inc</td>
<td>1</td>
<td>Navidad Project (1)</td>
</tr>
<tr>
<td>Iluka Resources Ltd</td>
<td>1</td>
<td>Virginia aka Old Hickory Mine (1)</td>
</tr>
<tr>
<td>Newmont Mining Corporation</td>
<td>2</td>
<td>Nevada Eastern Area Operations (1), Yanacocha Mine (1)</td>
</tr>
<tr>
<td>NovaGold Resources Inc</td>
<td>3</td>
<td>Galore Creek Project (2)</td>
</tr>
<tr>
<td>Placer Dome Inc*</td>
<td>16</td>
<td>Musselwhite Mine (6), Misima Mine (2), Porgera Mine (2), Porcupine Mine (1), Campbell Mine (1), Golden Sunlight Mine (1), South Deep (1), Zaldivar Mine (1)</td>
</tr>
<tr>
<td>Phelps Dodge Corporation</td>
<td>2</td>
<td>Henderson Mine (1), Cerro Verde Mine (1)</td>
</tr>
<tr>
<td>Polaris Minerals Corporation</td>
<td>2</td>
<td>Eagle Rock Quarry (1)</td>
</tr>
<tr>
<td>Rio Tinto</td>
<td>10</td>
<td>Diavik Diamonds Mines Inc (6), Kelian Equatorial Mine (1), Greens Creek Mining Company (1)</td>
</tr>
<tr>
<td>Stikine Gold Corporation</td>
<td>1</td>
<td>Sullivan Deeps Project (1)</td>
</tr>
<tr>
<td>Taseko Mines Ltd</td>
<td>1</td>
<td>Fish Lake Project (1)</td>
</tr>
<tr>
<td>Teckcominco Ltd</td>
<td>8</td>
<td>Red Dog Mine (3), Sullivan Mine (2), Antamina Mine (1), Pend Orielle Mine (1)</td>
</tr>
<tr>
<td>TVI Pacific</td>
<td>1</td>
<td>Canatuan Polymetallic Mining Project (1)</td>
</tr>
<tr>
<td>Suncor Energy</td>
<td>1</td>
<td>Oil Sands</td>
</tr>
<tr>
<td>Synerude Canada Ltd</td>
<td>3</td>
<td>Oil Sands</td>
</tr>
<tr>
<td>Shell Canada Ltd</td>
<td>1</td>
<td>Oil Sands</td>
</tr>
</tbody>
</table>
In order to look further at companies and projects in assessing why they were voted for by the survey respondents, the data from Question 8 and Question 17 were combined and analyzed. Question 8 asks survey respondents to identify any jurisdictions and/or companies in the world that they consider to lead in the development and application of social license or alternative concept, whereby Question 17 asks them to identify which mining company(s) and/or project(s) they would choose as a good role model for social license. Figure 2.9 is the first illustration of the combined data from Question 8 and Question 17. The purpose of this analysis is to see whether there is a relationship between a company leading in the development and application of social license and it being deemed as a role model for social license. It seems that there is a relationship and a company deemed as being a role model for social license would:

- lead in the development and application of social license; and,
- have projects that would score high on a social license basis.

**Figure 2.9 Total Respondent Votes for Survey Question 8 and Question 17 combined**

<table>
<thead>
<tr>
<th>Company</th>
<th>Question 8</th>
<th>Question 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placer Dome Inc.*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rio Tinto</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHP Billiton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teck Cominco Limited</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nova Gold Resources Inc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Falconbridge Ltd*</td>
<td></td>
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<td>Barrick Gold Corporation*</td>
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<td>Syncrude Canada Ltd</td>
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<td>Shell Canada Limited</td>
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<td>Newmont Mining Corporation</td>
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<td>Polaris Minerals Corporation</td>
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<td>Cameco Corporation</td>
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<td>Suncor Energy</td>
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<td>Redcorp Ventures Ltd.</td>
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<td>Phelps Dodge Corporation</td>
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<td>Noranda Inc*</td>
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<td>Kinross Gold Corporation* (Pre-BEMA)</td>
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<td>Gold Fields</td>
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<td>Codelco - Corporation Nacional del Cobre</td>
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Number of Respondent Votes (> 2 votes)
As illustrated in Figure 2.9, Placer Dome Inc, Rio Tinto and BHP Billiton rank high for both questions. However, it is interesting to see the discrepancy between the numbers of votes for each question. For example, BHP Billiton received six votes for Question 8 and twelve votes for Question 17. Did the survey respondents acquire knowledge on social license while answering the previous sixteen survey questions, hence a factor in increasing the number of votes for Question 17? There is a forty percent increase in the number of votes from Question 8 to Question 17.

Figure 2.10 illustrates the comparison between a company’s size and the perception of its ability to acquire a social license. In other words, is there a relationship between size (increased financial resources, increased international exposure and experience etc) and ability to acquire social license? The graph illustrates that there is an apparent relationship between company size and social license.

**Figure 2.10 Company Market Capitalization versus Total Company Votes**

(Source: Market Capitalization data from Company Websites)
As illustrated in Figure 2.10, some of the outliers in the data set include Placer Dome, (MC\(^3\)=US$11Bln) who garnered twenty-five votes, whereas BHP Billiton (MC=$495Bln) achieved only fifteen votes. It should be noted that a potential bias exists because the survey was primarily conducted in the home city of Placer Dome, where an awareness bias may exist. If we eliminate the outlier (Placer Dome) we still can see that social license is not necessarily a function of financial ability or strength, but rather about reputation and perception. Companies such as NovaGold, De Beers, and Teckcominco with relatively small market caps have higher votes, however this suggests that the notion that positive media representation based on long-term participatory consultation and/or best practices will lead to strong industry recognition. For instance, these companies have had projects developed in Canada in the last 10 years (see Figure 2.13). Other notable outliers include comparisons between Suncor Energy and Phelps Dodge (MC>US$8Bln) with just two votes and Polaris Minerals Corporation and Redcorp Ventures Ltd with two or more votes.

Figure 2.11 illustrates data comparing primary product to the sum of the market capitalizations that attempts to determine two things:

- Is there an industry perception that one particular group of miners (based on metal specialty) have a social license in comparison to other miners?
- Does the size of the industry segment matter?

\(^3\) MC = Company Market Capitalization
The companies were grouped into 16 commodity and specialty segments. The combined market capitalization of all the companies mentioned was also added. The data suggests that the gold industry has the best reputation for social license amongst all of the groups, despite the fact it is also a relatively small sector when compared to petroleum and the diversified miners. It should be noted that most of diversified miners own gold assets, and some of the gold miners own assets that would normally be in the domain of the other diversified or even specialty metals producers. Why does it seem that gold miners have such a disproportionate share of the votes? This could relate to the extensive public attention that the gold sector receives. This public awareness might relate to its long worldwide history (gold standard, currency, commodity price etc), as well the highly publicized examples of environmental mishaps, some with severe consequences and ongoing legacies. Through such examples as environmental events surrounding Galactic Resources Ltd’s Summitville Mine, Canadian Cameco Corporation’s Kumtor Mine and Newmont Gold Corporation’s Yanacocha Mine, the industry and public may just be more aware
of the gold sector than the other sectors. The term social license tended to emerge through Pierre Lassonde of Newmont Corporation using it in several speeches, hence increasing the association of social license with the gold sector. As gold is known as the international currency around the world, its greater visibility may also contribute to a better awareness of its social license or social impacts.

Figure 2.12 compares mine/project capacity (Million tonnes/year) to the number of votes the project received. The rationale for this analysis is that larger capacity mines are more costly to build; hence are built by companies with strong financial means or capacity. Smaller operations or mines appear to garner more votes than larger operations. Why is this? This could be attributed to:

- Smaller operations would tend to leave a smaller disturbance or footprint.
- Smaller operations may have the capacity to build a sustainable relationship with communities. In other words, perhaps less and more consistent personnel allows for stronger and more reliable relationships between company and communities.
- Smaller operations may be receiving notable media recognition due to the recent nature of the projects’ development.
- Only smaller projects/mines are being developed because of the cost and grade profiles are of lower risk than large scale, low grade deposits.
Figure 2.12  Mine/Project Capacity Versus Total Mine Votes

(Source: Project Capacity data from Company Websites)
Figure 2.13 Mine/project Start-up Date or Projected Start-up Date versus Total Mine Votes

Figure 2.13 illustrates the analysis of mine/project start-up date versus total mine votes. Does the start up date of a mine have anything to do with whether or not it gets more social license recognition? This suggests that the highest votes are attributable to mines built in the last 10 years, but not all mines built in the last 10 years received significantly more votes than older mines. Again, this suggests the fact that social license is attributable to specific mines; however the newest mines appear to have the highest profile. Of additional interest, the top seven mines in terms of profile or awareness are located in areas with a significant Aboriginal population. Again, this does not necessarily mean that mines built in areas of high Aboriginal populations will have a better chance of social license; rather it may be a result of the fact that the most recently built mines have all been located in areas of high Aboriginal populations due to:

- More urban or established areas are not permitting mines to be built.
- The “easy mines” have all been found. In other words, all recent discoveries have been in areas that are remote and typically occupied by Aboriginal peoples.

(Source: Project Start-up date data from Company Websites)
Figure 2.14 illustrates that there is an apparent relationship between company votes and mine votes. This result was anticipated, as companies viewed to have a strong social license should either build mines that have earned their social license, or that mines with a strong social license should reflect on their parent companies. However, as illustrated in certain instances, such as Placer Dome, BHP Billiton, Falconbridge, NovaGold, and Newmont, the company garners more votes than a specific mine.

Does this data suggest that the corporate reputation is better known than a specific mine? For instance, NovaGold has only two well known properties; however it has achieved the same number of votes as several companies with numerous assets. The data seems to suggest that social license appears to be asset specific rather than just based on a corporate reputation.
Question 18: Do you think a company and/or community could benefit from a Social License Scorecard (a dynamic framework that details the appropriate social license parameters) through which all stakeholders involved could observe a project’s social performance?

Sixty-five percent of survey respondents stated that a company and/or community could benefit from a social license scorecard.

This supports the opinion that there is a need for a template, or some instrument from which to benchmark social license. It shows that although industry is aware of the need for social license, some form of social license must be acquired and adhered to. There is little guidance or consistency in how to acquire it and what it actually is.

Question 19: Where do you consider that future work is required to develop the social license concept and process?

The top nine answers of where future work is required to develop the social license concept and process are illustrated in Table 2.3. These answers were given by respondents who wrote suggestions in the space provided for this question.
Table 2.3  Top Nine Answers where future work is required to develop social license

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<thead>
<tr>
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<th>Communication &amp; Engagement:</th>
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<tr>
<td></td>
<td>• Between all parties involved (e.g., industry, stakeholders, Aboriginal peoples, NGOs, and governments)</td>
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<td>◦ As a form of negotiation or best practices.</td>
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<td>◦ Participatory approach.</td>
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<td></td>
<td>◦ Learn techniques and methods for effective communication and engagement.</td>
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<td>◦ Bring NGOs in at the exploration phase.</td>
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<th>Education:</th>
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<tr>
<td></td>
<td>• Educating mining professionals that social license is part of doing business.</td>
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<td></td>
<td>• Educating communities regarding the project.</td>
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<td></td>
<td>• Educating students (University, High-school) and include social license to operate as part of the curriculum.</td>
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<td>• Education of the public in science, economics and current industry practices.</td>
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<th>Media:</th>
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<td>• Promote successful social license projects or companies.</td>
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<th>Social License Scorecard:</th>
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<td></td>
<td>• A monitoring process, whereby companies have a checklist or scorecard to measure projects social license success.</td>
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<th>Use local area managers wherever possible:</th>
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<td></td>
<td>• There have been cases whereby the success of a project rode on the management and staff working with other stakeholders and Aboriginal peoples.</td>
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|   | Ensure a strong and open EIA and SEIA, program ensuring your benefits agreement is comprehensive and understood. |

|   | An ongoing public consultation process is a key part of your 'social license'. |

|   | Continuous monitoring of the process. |

|   | Develop a resource center (online and otherwise) whereby interested participants can access case studies and information with respect to the project. |

Question 20: Would you and/or your organization be interested to collaborate with us further in this project?

Thirty-eight percent of survey respondents stated that they wanted to collaborate with us further in this project.
Conclusion

Section four of the survey identified that respondents required social license parameters in order to evaluate project success. This is done through an extensive consultation program, whereby the company and communities are the main determinants of whether or not a social license is obtained. Respondents identified four major companies as key role models for social license. They were: Placer Dome, BHP Billiton, Rio Tinto and Teckcominco. As a result, further analysis was conducted to determine what attributes they shared in order to be identified as key role models. These companies are all world leaders in their respective areas. They are large, and internationally diversified. One might conclude they have the experience and financial resources to dedicate to earning a social license. Part of their prominent success may also originate from a deep commitment to corporate social responsibility.

Respondents strongly suggested the need for a social license scorecard from which to benchmark and measure the success of their social license efforts. An interesting area of future research would be to investigate the transferability of social license after a takeover. What happens when a company with a strong reputation for social license to operate gets taken over by another company? Just because Barrick Gold acquired Placer Dome Inc and its mines, does not necessarily guarantee that Barrick has acquired or will be able to maintain Placer Dome’s social license. It may maintain social license at the regional or operational level, but social license is very much a corporate mentality or culture, something which must be developed and cultivated, and hence the acquisition of mines does not necessarily assure the transfer of social license. With the removal of the majority of the corporate office staff, those charged with developing and implementing social license may not necessarily have migrated over to the acquirer. Did Barrick pay more for Placer Dome’s recognition by industry as being a good role model, and a leader in the development and application of social license principles?

2.3 Summary

Survey respondents demonstrated the existence of a high level of awareness of social license in industry. It was also evident, however, that there is the need for clarification of how social license can be quantified for performance monitoring. Although there are numerous companies who have been identified as being a role model for successfully gaining social license, there seems to be a limited relationship between size, commodity sector or capacity. Survey
respondents tended to support the concept of a social license scorecard.

Survey respondents determined that the company and the communities are the main stakeholders in the social license negotiation process. They determine how, when and if a social license has been obtained or earned. As illustrated in the majority of the case studies, the Aboriginal peoples gave recognition to the company for exploration and extraction rights for their traditional lands. Without community support, the project will most likely fail.

The survey also allowed for the identification of potential limits on social license to operate. For example, social license has to be maintained daily by having responsible social and environmental performance, as well as by developing on-going, positive relationships built on trust and respect with stakeholders. A pulp mill manager reported to Gunningham et al (2002, p. 10): “We have to continuously convince the public that we have the right to exist.” Because social license relies heavily on reputations, one bad experience can undo years of hard work. Evidence indicates that trust between companies and communities is hard to build, but easy to lose.

Junior companies have limited financial resources. Much of the social license costs must be spent upfront prior to any revenue being received, making it difficult for smaller companies who have smaller balance sheets to develop projects. However, as illustrated throughout this chapter, as well as in Chapter 3, junior companies such as NovaGold Resources and Polaris Minerals Corporation are being recognized by their peers, as well as by project stakeholders as companies who have earned or are close to earning their social license. Smaller companies may not have the fiscal resources; however they have the manpower interested in acquiring community support and approval through effective consultations and social license parameters.

Each community tends to be distinct. They all have their own geographical location, and political, economic, social and environmental footprint, hence determining the requirements for a social license. For instance, Gunningham et al (2002) report on interview-based studies of fourteen pulp mills in their paper titled Social License and Environment Protection: Why Businesses Go Beyond Compliance, in order to determine the variance in the terms of a social license. Gunningham et al (2002, p. 30-31) state, “Since each community is unique, since each
mill's geographical location in relation to its local community will differ, and since the degree to which a community is economically dependent upon a mill, will also differ, so too will the strength and terms of the social license”.

It is important to recognize and tailor social license programs to the specific needs and wants of the exploration target area (ETA). It is quite conceivable that a small company cannot meet the financial demands of a social license program defined by stakeholders. However, a properly earned social license will ensure that the social programs and costs are balanced with respect to the capabilities and economics of the project and company. A proper engagement process will ensure this proper balance because if it is not met, the project will not be built.

Overall, the survey allowed for vital information to be obtained about prevalent industry perceptions of social license. Future work would involve obtaining a larger data set in order to acquire a better understanding of the population being measured, as well as reach a broader range of stakeholders (not primarily industry members) in order to diversify the opinions obtained. There is a strong relationship between environmental concerns and social issues regarding a project. Topics such as Impact Benefit Agreements (IBA) or Participation agreements (PAs), ISO 14001, and Environmental Impact Assessments (EIAs) need to be incorporated into the how to acquire a social license survey section, in order to link environmental concerns with social license principles.
3 CASE STUDIES: LESSONS LEARNED

Descriptions of the following case studies are a compilation of information from literature reviews, discussion and opinions from industry survey participants regarding particular mining projects. They include responses from industry members, NGOs, Government, academia, media, Aboriginal peoples, and consultants. Their views are intended to identify characteristics of social license to operate as they pertain to a particular case study. Negative and positive outcomes are looked at, in which the presence and absence of particular characteristics are of interest. In cases where little information is available, assumptions may be required to infer the presence or absence of a social license characteristic. However, it is hoped that this form of case study analysis is one means to identify the characteristics that will need to be considered in the design of procedures for obtaining and maintaining a social license, see Chapter 4.

3.1 Tambogrande Project, Northern Peru

Manhattan Mineral's US$125M Tambogrande project in northern Peru is an example of how an economically feasible million ounce gold project was indefinitely put on hold due to community protests and an overall lack of public support. In February 2001, after three years of exploration, violence erupted at the site and some four thousand people destroyed Manhattan Mineral’s exploration camp (BSR 2003: 6). The primary opposition to the project stemmed from concerns with respect to the impact of the proposed mine on the water supply, as well as the relocation of approximately 25% of the community to make way for the open pit. As the primary industry in the valley is agriculture, residents opposed any development which could threaten their crops or livelihood. This group approached an NGO, who helped to facilitate opposition against the project. An early engagement process educating the local people about the impact of the mine and its potential impact on the environment or water supply may have prevented the hostile outbreak. As a result of the protest and riots, any trust which may have existed before the riot, would now be lost. Manhattan Minerals’ market capitalization dropped by 28.6%, and shareholders collectively immediately lost C$23M (Probe 2002; MMC 2002). Ultimately, Manhattan Minerals ceased to exist. Today, Tambogrande remains on hold, an example of not only the immediate financial cost of failing to earn a social license, but the as yet to be determined cost attributable to the loss of exploiting an economically viable ore deposit.
Key social license characteristics that could be lessons learned from this project is the importance of early comprehensive stakeholder engagement which includes: educating stakeholders about mining (e.g., affect on water supply), importance of recognizing positive and negative community indicators (see Section 4.1.7), the identification of stakeholders (e.g., farmers) who may have concerns about the project (this group needs to be given high priority), and the importance in building relationships with NGOs working within the area.

3.2 Yanacocha Mine, District of Cajamarca, Peru

Newmont Mining Corporation’s Yanacocha mine in the district of Cajamarca, Peru was involved in a mercury spill. On June 2, 2000, a mercury transportation company failed to close one of the 200kg mercury flasks it was transporting, resulting in the release of 151kg of metallic mercury along a 42km stretch of road from the mine site to the coast\(^4\). Unfortunately, the truck passed through several villages, leaving behind pools of mercury. Due to a variety of reasons, the local inhabitants collected most of the spilled mercury unaware of the serious health hazards associated with the handling or burning of it in their homes. Their lack of education and specifically their ignorance with respect to the properties of mercury left the local people vulnerable to the situation.

Veiga et al (2001, p.196) state “In hindsight, this company, as well as mining companies in general, would benefit from a closer communications strategy with the community in question, allowing it to make decisions based on a more thorough understanding of the benefits and risks of mine operations”. It is easy to use today’s lenses to judge or make opinions about a situation and events five years past, however, it is important to consider lessons learned, in order to modify future planning practice.

Within the social license context, knowledge of community values, customs and beliefs is vital to mitigating potential risks and liabilities. Veiga et al (2001, p.195) state, “At the time of the accident, local people were in the habit of using mercury for spiritual and medicinal purposes. Some believe that mercury has healing properties and it is frequently spread on the floor around people who are ill”. It is important to understand such local cultural characteristics, which in this

\(^4\) Due to the discrepancy in reporting on the values (200kg versus 181kg) pertaining to this project, data and values from Veiga et al (2001: 195) are used to describe the project.
situation placed a high value on the collection of mercury. Furthermore, some people believed that the mercury contained gold, silver and uranium and others collected it for use in artisanal mining. The value of mercury increased even more when the communities learned that the company was paying the equivalent of US$35 per kg for mercury returned by residents. This caused some residents to hoard the mercury in the hope of realizing an increase in future value, while others returned it for their reimbursement. Despite the compensation, the value of mercury created by customs, beliefs and compensation put the community members at significant risk and the company’s clean-up program cost US$16 million.

A key social license characteristic that could be learned from this project is the importance of early comprehensive stakeholder engagement which includes: educating stakeholders about mining (e.g., mercury), together with the understanding of community culture, customs and values, (e.g., value of mercury).

3.3 Misima Mine, Misima Island, Papua New Guinea

The Misima Mine is recognized as being a successful project whereby all stakeholders worked together to preserve cultural values and norms of the island’s 9000 Aboriginal inhabitants (10 clans, living in some 20 villages), as well as for working together to avoid conflict, resolve issues and mitigate negative impacts on the environment. Allen and Jennifer Clark state (1995, p. 3), “Such efforts have been the hallmark of the project from the initial exploration phase through development and present day mining and will continue until the mine is closed”.

Exploration of the area began in 1977, but wasn’t actively pursued until 1985 by Placer Pacific (Placer Dome Inc). Construction of the open-pit mine began in 1988 and it opened in 1989 with mineable reserves of approximately 2.2 million ounces, a planned production rate of 15,000 tons/day, and a 10 year mine life. The capital expenditure for the mine was approximately US$150 million. Approximately, US$40 million dollars was contributed to the local people in the form of wages, royalties and compensation and an additional US$95 million dollars was contributed to the national economy over the lifespan of the project (Akoitai 2004).

Clark and Clark (1995) highlight the project’s numerous positive effects both for the nation, as well as for the local people in their report titled The Misima Mine: An assessment of social and
The potential benefits cited from H.L. Davies (1983) in the report were:

- cash flow to government from tax and/or equity earnings;
- increase in exports;
- increased employment and disposable income;
- improved health care and education;
- improved infrastructure;
- raised level of skills in work force;
- ancillary and catalytic development; and,
- diversification of the economy.

Clark and Clark (1995, p. 5) state, “The Misima mine is somewhat unique in that the Misimian people, from the outset, requested that significant benefits flow to the community at large but not at the expense of changing their way of life, culture or values. To achieve this objective the mining company undertook a number of initiatives”. Cited from Barwick et al (1995) the initiatives were:

- they constructed and/or upgraded island roads in order to allow all employees to continue to live in their home villages and within their customary society;
- they provided a bussing service to transport employees to and from work;
- they recruited only Misimians for the national component of the workforce;
- they established comprehensive training and skill development courses for Misimian recruits;
- they built community infrastructure (air strip, air terminal, upgraded the hospital, built a new police station, developed two ports, linked telecommunications to the national system, created housing subdivisions and built school classrooms) in locations to benefit the community beyond the mine life; and,
- they developed and supported an active business development program.

Other projects undertaken by the company that were of particular importance to the Misimian people listed in the report by Clark and Clark (1995, p. 5) were:

- Priority was given to the employment of the most affected traditional landowners while also ensuring that employment was spread across the Island and partially into the
surrounding archipelago. This ensured that all Misimian clans had some role and benefits from the project.

- A social monitoring committee was created which was composed of representatives from the mine, police, church, landowners, Misimian women’s groups, district and provincial governments and the national government. The group monitored the social impact evolution from project construction to operations of which changes were identified and remedial action had been taken, hence preventing problems from growing.

- The mining company arranged with the national government for a proportion of the project’s income tax revenues to be spent on the infrastructure in the Misima district on approved items such as bridges, schools and social services.

Despite the closure of the mine in 2004, the extensive closure planning process (commencing over 5 years before the ultimate closure) resulted in a number of positive legacy benefits to the local and regional Misimians. The local community had come to rely on the Misima Mine for its power, which replaced the original intermittent supply from the government diesel station at Bwagaoia (PNG CMP 2004: 11). Since the Province could not afford to run and maintain Misima’s power plant, it was sold to PNG Power who relocated it. The Misima Mine closure plan provided funding and installed a hydroelectric generation system operating from water that filled the pit formed after mining (PNG CMP 2004: 11). This is being operated by landowners to provide a twenty-four hour per day sustainable electricity supply. A comprehensive closure plan, compiled with input from the local community resulted in a sustainable solution with a positive future legacy for the local Misimians. Success is also based on the Misimians resilience fostered by a long term working relationship with Placer Dome.

Key social license characteristics that could be lessons learned from this project is the importance of early comprehensive stakeholder engagement which includes: preservation of the environment and community culture, values, customs, norms etc and the collaborative efforts to avoid conflict, resolve issues and mitigate negative impacts.

3.4 Pogo Project, Alaska, USA

The Pogo Project was scheduled to start-up in the first quarter of 2006. It is located on Alaska State land and is an underground mine with a probable reserve of 7.0 million tonnes grading
16.12 g/t (0.47 oz/st) gold (3.6 million oz.). Annual production is scheduled to be 350,000 to 500,000 ounces gold over a 10-year mine life at 2,500 tpd. The project is a joint venture between Teckcominco (40%) and operator, Sumitomo Metal Mining (51%) and Sumitomo Corp (9%). The capital cost is US$284 million and the operating cost is expected to be $US62/tonne. The final feasibility study was completed in May 2004.

The following data is from Michael Allan’s (VP Engineering) presentation on September 30th, 2004 at the CIM Luncheon in Vancouver, British Columbia. He outlined the project permitting process and milestones in order to illustrate how community support allowed for the permitting process to take only three years and nine months to complete, instead of the average 8 year timeline (see Figure 3.1). On March 15, the National Pollutant Discharge Elimination System (NPDES) permit was issued with an effective date of April 16 (the Environmental Impact Statement (EIS) process requires a 30 day public appeal period). On April 14, a local NGO group Northern Alaska Environmental Center (NAEC) filed an appeal with the Environmental Appeals Board which stayed the issuance of the permit. During this period, over 300 people were already working on the project. The company halted the project pending resolution of the appeal. The public voiced its concerns and media attention was directed at the issue throughout North America. Public support was overwhelmingly positive and by May 1st, 2004 it was apparent that NAEC was facing intense pressure from the community and State, hence settled the appeal whereby a list of issues was supplied to Pogo for negotiation. On May 5th, 2004, a Settlement Agreement was signed. Pogo agreed to two additional monitoring wells and a public advisory board. On May 7th, 2004, the NPDES permit was formalized and became effective.
Without an effective social license process, and proper community engagement, the appeal process could easily have extended indefinitely. A project is most vulnerable to failure between construction and commissioning. It is at this point in the construction process that the company and banks have commitments hinging on the successful start up of the mine. Failure to commence production on schedule could trigger default clauses leading to the closure and even sale of the project as the banks attempt to recover the project loans. Since Pogo had a very strong support base at all levels, the appeal process was easily remedied within three weeks.

A key social license characteristic that could be learned from this project is the importance of early comprehensive stakeholder engagement which includes: the acquisition of community support and consensus prior to project development, building relationships with NGOs working within the area and the design and implementation of collaborative programs that meet community needs.

3.5 Eagle Rock Quarry Project, Vancouver Island, B.C., Canada

An example of the benefits of effective engagement is Polaris Minerals Corporation, the Hupacasath, Ucluelet, and Tsehaht First Nations Eagle Project on Vancouver Island, B.C. The project is located 15kms south of Port Alberni. It has projected the marine shipment of up to 6 million tonnes of construction aggregate per year and it has a potential life in excess of 100 years. After an extensive literature review, attendance at a Canadian Business for Social Responsibility (CBSR) workshop titled “Building Sustainable Relationships” (February 8th, 2005) chaired by Chief Judith Sayers and Marco Romero, and an interview with Marco Romero.
this project was found to be an excellent example of how to acquire a social license because of the collaborative negotiation process between all parties, as well as the business agreement executed in July 2002 whereby Polaris holds a seventy percent interest and the Hupacasath and Ucluelet First Nations each hold ten percent interest in the project. Another ten percent is being held for the Tsehaht First Nations who still have to ratify the agreement. In a draft version of *Mining and Aboriginal Community Engagement: A Guidebook for Minerals Exploration and Mining*, Marco Romero (Polaris’s President and CEO) (November 19, 2004) remarks on the project’s success as being based on the following:

- respect for the asserted traditional rights and claims of its First Nation partners;
- acknowledgement that those rights include unextinguished Aboriginal rights, and potentially, title;
- early and sustained engagement by senior management in communication and relationship-building;
- impartiality in dealing with its current and potential First Nation partners, and refraining from taking positions on issues between them – particularly issues involving their overlapping claims to traditional territories; and,
- recognition that First Nation communities generally lack the capacity (expertise and capital) required to evaluate complex resource development opportunities (McKnight et al 2005: 117).

In the report he further describes this success by stating the following:

Polaris approached its potential Eagle Rock Partners very early in the process of research and preparation. We asked for permission to conduct field research on their traditional territories and to meet with them to explain our project concept. We encouraged them to engage experts and consultants of their choice to evaluate the information we presented to them at our expense. We answered all their questions and provided all the information they asked for (McKnight et al 2005: 117).

Judith Sayers (Chief Councilor of the Hupacasath First Nation) (November 25th, 2004) states, “The smart companies will continue to see consultation and accommodation as building blocks for establishing positive, enduring relationships with Aboriginal communities” (McKnight et al 2005: 120). She continues by identifying the importance in the building of community capacity as the key contribution to the Hupacasath community. She states,

Once we had confirmed the quarry concept could be environmentally benign, and we had negotiated a business agreement committing the project to high environmental
standards, we quite quickly focused on the potential for strengthening our most important assets – our young people. Eagle Rock’s future employment opportunities provide tangible incentive and purpose for our youth to pursue advanced education and skill development. When I talk to our youth, I tell them, “Someday you can be one of Eagle Rock’s janitors, it’s CEO, or anything in between. It is up to you.” At least as important as our jobs, our direct involvement in ownership and control of the project builds community pride, creating hope and inspiration about entrepreneurial possibilities for our people. (McKnight et al 2005: 119).

This is one of the projects voted by survey respondents as being a good role model for social license (see Figure 2.8 and/or Table 2.2). The project also received the prestigious 2006 Mining and Sustainability Award for its efforts to promote sustainable development in the British Columbia mining sector. Michael McPhie, (President and CEO of the Mining Association of British Columbia) states (2006),

Polaris Minerals has created positive, mutually productive relationships with local communities and First Nations, and serves as a model for others in the mining industry to follow... The Polaris management team and their community and First Nation project partners deserve tremendous credit for the leadership and commitment that has been demonstrated which has led to such a success... B.C.’s mining and minerals industry continually strives to maximize its economic contribution, engage with communities and provide stewardship for our natural environment. Polaris has clearly shown how mining and mineral development can provide a significant net benefit to society.

Polaris Minerals Corporation, for example, contacted the local NGO on Vancouver Island prior to making contact with the communities and Aboriginal peoples within the ETA for the Eagle Rock Project. This action fostered a relationship built on trust between the NGO and company, facilitating the understanding of the situational analysis indicators found within the ETA (Romero 2005).

Polaris Minerals Corporation has ensured open communication, educated local stakeholders and First Nations about the project, and understood the Hupacasath, Ucluelet and Tsehaht First Nations culture, customs, language and history, thereby building relationships on respect, and trust. However, the key to their success as well as the other industry examples in section 2.2.1 is that the First Nations and Aboriginal communities are seeking participation in many facets of the project (e.g., co-management, economic development and stewardship over the local environment); hence have a vested interest in the successful outcome of the project.
The results of a community survey (with forty-two percent), and letters of support from community leaders and organizations (with thirty-nine percent), allow the company to obtain verification on if their consultation programs are effective or not. An extensive literature review revealed that Polaris Minerals Corporation has had the greatest number of letters (seventy-three in total) by government, stakeholders, non-governmental organizations, general public and First Nations supporting the Eagle Rock Quarry project. Granted, as illustrated in Figure 2.13, the Eagle Rock Quarry project is somewhat new (after year 2000), hence can utilize mass media to promote and document their project. However expectations have changed in terms of ‘the hoops’ a company has to jump through in the twenty-first century, in order to get a project ‘off the ground’. Growing societal demands dictate the voluntary and involuntary platforms companies must adhere too, hence raising social license from being a mere idea to a reality. The low ranking by survey respondents on the receipt of a government permit as a determinant of whether or not a company has obtained a social license, illustrates this point exactly. That is, project success is no longer reliant on government permits, but on community approval.

The success of the Eagle Rock project has also facilitated Polaris Minerals Corporation’s multi-million dollar Orca Sand and Gravel Project at Port McNeil. The fostering of sustainable relationships, especially in First Nations communities, allows the development of new projects in British Columbia’s mining sector. Another project that “…demonstrates that the private sector and First Nations in B.C. can work together to overcome economic uncertainties created by unsettled First Nations land claims. The partnerships have been hailed as industry best practices and are being emulated by other companies, including independent power producers” (Stepping Stone 2006: 4).

A key social license characteristic that could be learned from this project is the importance of early comprehensive stakeholder engagement which includes: the acquisition of community support and consensus prior to project development, understanding culture, customs and values, development of a collaborative negotiation process, building relationships with NGOs working within the area, business partnerships with First Nation groups, and recognizing positive and negative community indicators as an indicator of project success (e.g., letters of support, etc).
3.6 **Wallaby Project, Granny Smith Mine, Western Australia.**

Another example of the importance of effective stakeholder consultation and a participatory planning program is Placer Dome’s (now Barrick’s) Wallaby Project, at the Granny Smith Mine, in Western Australia. There has been a long history of mining in this area dating back to the mid-1800s, which had significant impacts on the Aboriginal peoples living in the area. The Granny Smith mine commenced operations in 1990, and was originally expected to have a 10 year lifespan. However; in 1998, the discovery of gold deposits eleven kilometers south of the Granny Smith processing plant promised to extend the mine life for 20 or more years. The new satellite operation, named Wallaby, fostered a dynamic interaction between Granny Smith’s decision-makers, technical advisors and stakeholders (e.g., Aboriginal peoples, government and non-governmental organizations, etc). The program was identified in the Mining, Minerals and Sustainable Development North America report entitled *Seven Questions to Sustainability: How to Assess the Contribution of Mining and Minerals Activities* (2002a, p.26) as having the following fundamental steps:

- Stakeholder identification;
- Preparation of a briefing document (titled the Wallaby Briefing document);
- Issue and Impact Identification Workshops; and,
- Preparation of the environmental approval submission document with assistance from stakeholders.

The *Placer Dome Asia Pacific Sustainability Report* (2000, p.10) identified the program as having an additional fundamental step that also contributed to its success:

- Completion of the Wallaby Environmental Review (WER).

The stakeholder consultation sessions, preliminary field investigations and initial scoping studies identified a range of potential environmental impacts, hence as the consultation and planning process advanced, stakeholders were able to confirm that there were a number of environmental issues that should be defined as ‘key issues’ (PDAP 2000: 10). In many projects, environmental issues are the precipitator to social issues and hardships. Many mining projects have been shut down by community protests and dissent (e.g., Newmont’s Cerro Quilish project). Nicole Miles from Sustainable Development and Aboriginal and Islander Studies at Murdoch University (2001) states,
For most of the past century there have been few significant attempts to cultivate positive relations with local indigenous people. The gold mining industry was particularly weak with respect to the employment of aboriginal people. This has been a costly oversight, which has only recently begun to be addressed. This case study [the Wallaby Project] highlights an outstanding example of this change in industry perspective from turning a blind eye towards indigenous issues to one that views gold mining as a potential major contributor to a socially more sustainable Western Australian future, particularly in remote rural areas such as Leonora. Through considering the well being of local communities, in addition to the accepted needs for proper environmental and economic stewardship, isolated operations such as Granny Smith have made great strides toward this goal in a relatively short period of time.

It is evident that it is vitally important to understand legacy issues, in order to design an effective consultation process that fosters relationships built on mutual trust and respect. By recognizing and addressing environmental issues, mining companies demonstrate the ability to lessen the risk of not developing economically viable projects.

The Government of Western Australia: Department and the Premier and Cabinet highlight key sustainability characteristics on their website for the Wallaby project as follows:

- Ingenuity, resourcefulness and creativity in regards to rehabilitation approaches;
- Genuine approaches taken towards the building and maintaining of positive relations - both employees and the wider community;
- Contributing to the quality of life of local community - respecting cultural and social needs;
- Wider social contribution also - in the form of the Ruggies Recycling Program and its contribution to Princess Margaret Hospital;
- Successful communications with government and non-government agencies, and grass-roots community members;
- Positive approach to long-term issues considered too hard by previous generations; and,
- Sustainability reporting - transparency and openness in communicating progress towards sustainability (Miles 2001).

As a result of this process, two reports were established by Placer Dome Inc: *Granny Smith Sustainability Report 2000* and *A Case Study of the Wallaby Consultation Process*. Both reports provide information on the sustainability aspects of the Wallaby project. Placer Dome Inc was the highest rated company by survey respondents in the development and application of social license making the company a good role model for social license (see Graphs 2.1 and 2.8).
Key social license characteristics that could be lessons learned from this project is the importance of early comprehensive stakeholder engagement which includes: understanding legacy issues, the acquirement of community support and consensus prior to project development, fostering relationships on trust and respect, and the design and implementation of collaborative programs that meet community needs.

3.7 Las Cristinas Gold Mine, Southeastern Venezuela.

Exploration began in 1995 and lasted five years at Placer Dome’s (now Barrick) Las Cristinas gold mine in southeastern Venezuela. During this time there were thousands of illegal small-scale or artisanal miners on the Placer concession who had been attracted to the area after the discovery of gold deposits. These miners were organized into a cooperative, and used highly destructive techniques to find and extract gold, which were very detrimental to the natural environment. They also had the tendency to be aggressive, as well as were armed and violent, whereby the company had concerns that clashes with these miners could lead to allegations of human rights abuses, hence affecting its global reputation (BSR 2003: 20-22). “In most cases artesanal miners do not have a stable legal status, which is one reason they use informal means (land invasions, sabotage, protests, and so on) to obtain their ends” (BSR 2003: 22). The company negotiated with the artisanal miners operating in the concession area to develop an innovative project, whereby they all could co-exist together. “The change of perception – from competition to coexistence- is crucial if a social license to operate is to be gained” (BSR 2003: 21). An agreement was negotiated between Placer Dome and some of the larger cooperatives, whereby the artisanal miners could legally mine a portion of the concession. Placer Dome agreed to provide the following:

- financial assistance to help to get the project started;
- technical assistance to improve the technology the miners were using, thereby increasing the yield from their activities (increasing their income) and decreasing the impact of their

5 Located in Venezuela, it is considered to be amongst the worlds largest undeveloped gold projects In 1999, Placer Dome declined to put the project into production after nearly a decade of legal battles over the mine’s ownership. Placer officially claimed the project was no longer economically feasible due to low gold prices at the time, so sold its stake for $50 to Vannessa Ventures, with a clawback provision if a mine of a specific size was ultimately built. Despite numerous rulings in favor of Vannessa Resources, the project is still in the hands of Crystallex. Since that time, the Las Cristinas case has migrated to the International Centre for Settlement of Investment Disputes (ICSID), a Washington, D.C.-based organization which is backed by the World Bank, for arbitration. It remains unclear to this day who really owns the mine and who will inevitably gains access to its riches.
activities on the environment,

- insistence that basic occupational health and safety provisions were adhered to,
- assistance in restructuring commercial channels eliminating intermediaries to increase the income to the miners, and,
- social programs for the miners and their families (BSR 2003: 22).

Using constructive engagement, "...Placer [Dome] was able to negotiate agreements that effectively removed the small miners from the geographic focus of its exploration activity" (BSR 2003: 22). Placer Dome spent approximately US$2M during the five years period on programs related to the small miners.

Maintaining a sound track record as a positive corporate reputation is the fourth most highly rated statement on how to acquire a social license. It is a result of adhering to and honoring some to all of the other social license statements. In today's information age whereby project indiscretions can be broadcasted internationally, almost immediately through the internet, companies now have to be more conscious of the impact of their actions to maintain or acquire a social license to operate, as well as their 'reputational capital'.

Key social license characteristics that could be lessons learned from this project is the importance of early comprehensive stakeholder engagement which includes: co-existence between company and artisanal miners allowing for the introduction of new technologies, as well as maintaining corporate reputation or 'reputational capital', and the building of trust with locals (non-artisanal miners) who relied on the company to deal with negative impacts from artisanal miners.

3.8 Red Dog Mine, Northwest Alaska, USA.

The Teckcominco Red Dog Mine is an example of constructive relations and co-operative development with First Nation peoples. The project is located 140 kilometers north of the Arctic Circle in northwest Alaska. In the early 1970s, Cominco (now Teckcominco) acquired the exploration concessions on land traditionally occupied by the Inupiat Aboriginal peoples. The Northwest Alaska Native Association (NANA) Regional Corporation was created in order to represent the interests of the Inupiat people. The United States Congress passed an Act (after
Teckcominco acquired the concession that gave Aboriginal peoples additional rights over resource extraction that seemed to supersede Teckcominco’s historical rights resulting in many lawsuits and countersuits. As a result, relations between Cominco and NANA deteriorated to the point where NANA was going to sign an exploitation agreement with another mining company (BSR 2003: 18).

Once the company recognized how important it was for NANA to preserve the traditional ways of life of Inupiat Aboriginal peoples, as well as obtain economic benefits for its members, the relationship between Cominco and NANA improved. Some of the innovative features of the 1982 operating agreement were noted in the Business for Social Responsibility (BSR) report (2003, p. 18-20) titled Social License to Operate, as follows:

- provisions allowing NANA members to take vacation time to carry out traditional caribou hunting, as well as Teckcominco limiting their ore shipment times so as not to interfere with the caribou migration;
- staged threshold levels for local hires were agreed on, with the company committing to an extensive training program to ensure compliance;
- agreed to make royalty payments to NANA from the beginning of production of the mine, and after Cominco recovered its investment; and,
- allow NANA to gradually invest its capital and eventually become a 50% equity partner in the mine itself.

Other innovative features regarding the project not noted in the Business for Social Responsibility report (2003) are:

- agreed to cap annual production at 2.33 million metric tonnes, hence stabilizing and extending production and employment for a projected lifespan between 45 to 50 years (McKnight et al 2005: 121); and,
- the creation of a ‘subsistence committee’ comprised of eight NANA shareholders with the power to shut down the transportation road between the mine and the port during caribou migration, as well as establishing the dates of the shipping season in order not to interfere with the whale migration in the Chukchi Sea (Brady et al 2003: 16).

In 1989, the mine went into production. Cominco’s initial strategy of defending their interests through legal means could have cost them the Red Dog project, as well as their global reputation.
Their ability to overcome early corporate decisions and implement an open approach to negotiation and partnership, is perhaps why survey respondents voted this company as one that leads in the development and application of social license. It appears that Cominco’s ability to be flexible and respond to policy change (adaptive management), allowed for what was at the time progressive sustainable development through the Red Dog project. In this project it appeared that it was important for the company to be the primary determinant on whether they had obtained a social license.

Key social license characteristics that could be lessons learned from this project is the importance of early comprehensive stakeholder engagement which includes: cooperative relationships and collaborative long-term development, and corporate flexibility (e.g., the ability to change project mandates, in order to acquire project success).

3.9 Galore Creek Gold Project, Tahltan Territory, B.C., Canada.

In 2004, NovaGold Resources Inc took over the management of the Galore Creek project located in the traditional Tahltan Territory. The area around Galore Creek had been explored by members of the Tahltan since the late 1950’s (TCC 2005: 7). The process of building trust and respect appeared to be started immediately. CEO and President, Rick Van Nieuwenhuyse met with the Chair of the Tahltan Central Council, Chief of the Tahltan Band, a Tahltan band councilor and an Iskut Band Councilor (who is now Chief) to discuss the project. Instead of telling them their plans, the company representatives consulted with the Aboriginal representatives on how they could develop a long-term relationship (Findlay and Gagnier 2006: 21). The relationship was based on involved participation and decision making by the Tahltan. For instance, NovaGold’s proposed southern access road to the site was dropped in favor of an alternate because the Tahltan were concerned with potential issues pertaining to the Iskut and Stikine Rivers (TCC 2005: 7). The Tahltan were also very involved in the collection of environmental baseline data, and participated in the Environmental Assessment (EA), whereby they formed the Tahltan Heritage Resource Environmental Assessment Team, as well as a new joint venture, Rescan Tahltan Environmental Consultants. After an eighteen month negotiation process, a participation agreement was signed. A letter submitted along with the EA application from the chair of the Tahltan Central Council states,
The Tahltan believe that NovaGold provides the leadership, management and vision in partnership with the Tahltan Nation to make the Galore Creek project socially and environmentally sustainable. The present leadership of NovaGold is creative and transformative in their approach to the relationship with the Tahltan Nation and in taking mining to the next level of social and environmental responsibility. NovaGold is the mining industry leader in Tahltan territory to take mining to this next level that will ensure mining brings more benefits than impacts to the Tahltan and B.C. citizens. The Tahltan Nation is supporting the Galore Creek project in receiving an Environmental Assessment Certificate (Findlay and Gagnier 2006: 22).

The following are selected highlights from Working Together: The NovaGold-Tahltan Participation Agreement (2006, p. 22) that demonstrate the significance of the levels and scope of agreement that was reached:

- recognition of the Tahltan’s traditional rights, title and interests to the project area as well as NovaGold’s rights to explore and develop mineral resources in the Galore Creek Valley;
- established measures and procedures that will fully engage the Tahltan in all aspects of environmental protection during the mine’s life;
- commitment to maximize training and employment of Tahltan members throughout the mine life and create processes for ongoing dialogue regarding career advancement;
- a process to ensure access for Tahltan businesses to maximize business opportunities for the supply of goods and services throughout the mine life and during mine closure; and,
- NovaGold’s financial contributions to the Tahltan heritage Trust Fund (no less than C$1 million annually) to be used to mitigate any adverse social or cultural impacts of mine development.

The Galore Creek project is another example whereby a participatory approach with adaptive and co-management strategies can lead to project success. The process of building a relationship early, based on trust and respect, is fundamental to successful negotiations between all parties, as well as establishing a framework whereby all parties have equal contributions in giving and acquiring knowledge. Regardless of exploration concessions and/or permits obtained, a company needs to build a relationship with stakeholders and Aboriginal peoples first because they are the main determinants of whether a social license has been obtained and if the project is developed. Possibly the most illustrative example of this is the Participation Agreement between the Tahltan First Nations and NovaGold. This is rare example of a project in British Columbia where such a Participation Agreement can be viewed by the general public.
Key social license characteristics that could be taken to be lessons learned from this project areas follows: the importance of early comprehensive stakeholder engagement; the value to be gained from a Participation Agreement (which can be viewed by the general public); the acquisition of community support and consensus prior to project development; the value gained from understanding culture and customs; development of a collaborative negotiation process; and the benefits accrued from developing business partnerships and capacity development with Aboriginal peoples.

3.10 Diamond Mine Projects in the Northwest Territories

The next three examples to be discussed briefly are BHP Billiton's Ekati Diamond Mine, Rio Tinto's Diavik Diamond Mines and De Beers' Snap Lake deposit in the Northwest Territories, Canada. Tom Hoefer (Manager, External & Internal Affairs Diavik Diamond Mines Inc) (2004, p.2) states, “Over the last century, indigenous groups felt they were less equal than other Canadians”. This inequality was exasperated in the early 1930’s, with the development of the Radium deposit (Eldorado Mine) at Great Bear Lake. Its discovery fueled exploration in the North for other minerals such as gold and later diamonds. After WWII, the Canadian frontier became the engine for growth; hence ‘outsiders’ flooded the North bringing with them a host of issues, creating an even greater divide of inequality. By the 1970’s, Aboriginal groups began to fight for constitutional recognition. In 1973, the Calder Case was the first time Canada’s highest court ruled that Aboriginal title was rooted in the “long-time occupation, possession and use” of traditional territories (Calder v. Attorney-General of British Columbia 1973) (McKnight et al 2005: 26). While government had signed two treaties with northern Aboriginal groups in 1899 (Treaty 8) and 1921 (Treaty 11), no land had been transferred with them and this was not corrected until 1984. By 1993, three more land claims had been settled in the Mackenzie Delta region, whereby they provided Aboriginal groups with a mix of surface and subsurface land rights. Aboriginal groups began to recognize the importance of selecting lands with high mineral potential. The treaties gave Aboriginals the right to co-manage resource development, hence sponsoring the creation of boards of public government such as the Mackenzie Valley Resource Management Act (MVRMA) of 1998, whereby a proponent has to describe how its project will benefit local communities, “…making it somewhat unique environmental assessment legislation” (Hoefer 2004: 2). Tom Hoefer (Manager of External & Internal Affairs at Diavik) at The Northern Mines Ministers Conference (November 26, 2004, p. 2) states, “Clearly, Aboriginal
groups in the Northwest Territories have won an important right to influence their participation in resource-based projects”.

In 1991, diamonds were first discovered at Point Lake, sparking the Northwest Territories ‘diamond rush’, the largest mineral staking rush in North American history. The exploration for diamonds is time consuming and costly and with the ‘use it or lose it’ claim process, it became apparent to many that large partnerships were needed to explore and mine in this challenging location and climate successfully. The world’s largest companies such as BHP, Rio Tinto and De Beers were needed to provide the bulk of the financial power, in order to develop in the North. As described in the next three case studies, these risk tolerant companies would have to endure more than environmental conditions to get their projects off the ground; however their global experience and strong financial resources help to ensure their success.

3.10.1 Ekati Diamond Mine, NWT, Canada.

BHP Billiton’s Ekati Mine is located 300 kilometers northeast of Yellowknife and 200 kilometers south of the Arctic Circle in the Northwest Territories, Canada. The mine is a joint venture between BHP Billiton Diamonds Inc. (80%) and geologists Charles E. Fipke and Dr. Stewart E. Blusson (10% each). In 1991, the first kimberlite was discovered and seven years later production began. According to Kevin O’Reilly, a consultant for the Labrador Inuit Association, (1998, p. 2), “There are no settled land claims covering the project area”. The following unsettled land claims are:

- The Nunavut Territory and Inuit land claim boundary is about 90 km to the north and east.
- Inuit live in the Kitikmeot region to the north of the mine and have demonstrated traditional land use and occupancy of the project area.
- The Treaty 11 signed by the Dene in 1921 only covers the area on the south shore of Lac de Gras so the Ekati mine is in an area of unextinguished Aboriginal title. The Dogrib Treaty 11 Tribal Council were in the process of negotiating a comprehensive land claim that covers a large area north of Great Slave Lake including the project site.
- The Treaty 8 communities of Detah, Ndilo and Lutsel K’e were in the preliminary stages of negotiating treaty entitlement to the Akaitcho territory that covers a large area including the mine site.
• The North Slave Métis Alliance was attempting to negotiate a comprehensive land claim that would cover the project site.

The federal government through the Department of Indian Affairs and Northern Development (DIAND) retained jurisdiction over lands and waters throughout the Northwest Territories, except for lands held privately, such as those owned by Aboriginal governments. Following comprehensive feasibility studies, extensive community consultation and environmental assessment, in 1996 an implementation protocol was signed by BHP, DIAND, the Government of the Northwest Territories (GNWT) and four Aboriginal groups (Dogrib Treaty 11 Council, Akaitcho Treaty 8, North Slave Metis Alliance and the Inuit of Kugluktuk and the Kitikmeot Inuit Association). A voluntary and confidential Impact Benefit Agreement (IBA) was signed with Akaitcho Treaty 8. In 1998, a voluntary and confidential IBA was signed with the North Slave Metis Alliance. The IBAs allowed benefits to flow to Aboriginal groups whose traditional lands the mine was situated on. The Aboriginal groups were reported to expect the following from their agreements:

• active participation in economic progress,
• recognition that education is a key element for this participation; and,
• need for assurances that wildlife and the environment will not be impaired by development (O’Reilly 1998: 5).

As listed in Environmental and Socio-economic Challenges in Developing the Ekati Diamond Mine (March 22, 2003), BHP’s views on its socio-economic responsibilities were stated to include the following:

• BHP Billiton works with the affected communities to identify their needs and priorities for sustainable development.
• Local employment and business opportunities are identified.
• Support extends to capacity building for community organizations and preservation of cultural heritage values.
• A Socio-economic Agreement would offer guidance for creating business opportunities for northern and northern Aboriginal companies.
• Large contracts were envisaged to create opportunities for local contractors and suppliers.
• Spending targets for the operating phase of the mine was 70% of total spending. In 2001, $328 million of the $385 million budget was spent in the North.

As per their assurances regarding the environment, the Aboriginal groups had concerns over the adequacy of BHP's Environmental Impact Statement and the lack of detail concerning their adaptive environmental management strategy to deal with many of the significant concerns about the impacts of the project on caribou, water, fish and other resources (O'Reilly 1998: 4). As a result, a non-profit ‘Agency’ was established, whereby the environmental advisory group (multi-stakeholders) is responsible for reviewing the design of monitoring programs and results from both government and BHP. “For example, a Director noticed a steep decline in oxygen levels in a lake used for sewage disposal even though the same data was provided to a government department and BHP management. The Agency immediately notified BHP who then took remedial action avoiding a potentially harmful and expensive situation” (O'Reilly 1998: 7). The funding for the Agency for the first two years was $450,000 per year with BHP contributing $350,000 and the remaining amount split between the two governments. O'Reilly (1998, p. 5) states:

It is clear that the Environmental Agreement went well beyond what government and BHP had ever anticipated. It would be fair to say that all parties negotiated in good faith and that significant gains were made in the public interest as a result of the direct participation of the Aboriginal organizations.

Mining’s history of providing community benefits has not been strong in the north, and there are no established recipes for success. However, more recent projects such as Falconbridge’s Raglan Nickel Mine illustrate how change can reap rewards for all stakeholders involved. In 1995, Falconbridge and the Makivik Corporation signed an Impact and Benefit Agreement (IBA) with the Inuit of Nunavik. The agreement ensures that the Inuit of Nunavik acquire benefits in terms of employment, profit sharing, the creation of service companies; and input into environmental management. This and contemporary projects, for example the Troilus Gold Mine IBA in Quebec between the Inmet Mining Company and the Cree of Mistissini) opened a new door for negotiation and project success in the North. As illustrated above, Ekati’s long negotiation process (through the political, economic, social, and environmental spheres) laid the groundwork for future mining project success such as Rio Tinto’s Diavik mine, as well as others (e.g., the Tahera Diamond Corporation project, Nunavut; Virginia Gold Mines, Northern Quebec project; and De Beers’s Snap Lake NWT project) (Wolfe 2001: 1-5). All these projects involved
extensive negotiation and participatory approaches with Aboriginal peoples. As in the case of Diavik, experienced Aboriginal stakeholders who had gained experience from the negotiation process with Ekati were able to assist in subsequent negotiation processes.

Key social license characteristics that could be draw as lessons learned from these Northern diamond projects are the importance of: early comprehensive stakeholder engagement which includes an Impact Benefit Agreement negotiation; the acquisition of community support and consensus prior to project development; developing an understanding of culture, customs and values; developing a monitoring agency; and using a collaborative negotiation process with long-term development strategies.

3.10.2 Diavik Diamond Mines, NWT, Canada

Rio Tinto’s Diavik Diamond Mine is located 300 km northeast of Yellowknife, NWT, Canada, and 30 km from the Ekati mine. Diavik is an unincorporated joint venture between Rio Tinto (60%) and Aber Diamonds (40%). The mine was commissioned in 2003 and reached full production in 2004. The mine life is expected to be between 16 to 22 years. The mine is expected to produce more than 107 million carats over its life and the estimated average diamond value is US$63 per carat (based on a 2000 valuation). Like Ekati, this project also faced issues of unsettled land claims, however, in the mid-1990’s Rio Tinto created a community policy requiring member companies, amongst other things to “...build enduring relationships with our neighbors that are characterized by mutual respect, active partnership, and long term commitment” (Hoefer 2004: 4). The subsequent success of Diavik is considered to relate to: the timing of following on from Ekati’s success; Rio Tinto’s reputation for its progressive community approach, as well as being experienced stakeholders elsewhere.

Five Aboriginal groups emerged with an interest in the Diavik project area: the Dogrib, Yellowknives, and Lutsel K’e Dene, the North Slave Métis, and the Inuit of the West Kitikmeot region of Nunavut. Intensive information gathering sessions involving hundreds of people allowed the company to build a rapport with the stakeholders in order to acquire vital information about their expectations, while expressing their own. The stakeholders were involved in many aspects of the mine plan: environmental assessment, community development (through employment, purchasing policy, skills and training) and community advisory boards.
which allowed for a new level of corporate transparency. Success was based on participation by all stakeholders, hence reinforcing three styles of agreements:

- Aboriginal Participation Agreements;
- Socio-Economic Monitoring Agreement; and,

Aboriginal Participation Agreements (PA) were proposed by Diavik, instead of Impact Benefit Agreements (IBAs). They felt that the term Impact Benefit Agreement was biased and didn’t reinforce its partnership approach. Individual PAs were negotiated with each of the five local Aboriginal groups. The PAs addressed training, employment and business opportunities, as well as four out of the five agreements called for the creation of PA Implementation Committees. This committee was intended to meet regularly to measure progress and resolve issues. The agreements addressed annual cash payments (as requested by the Aboriginal groups), and some firm commitments by Diavik to outsource business to them.

A Socio-Economic Monitoring Agreement (SEMA) with the GNWT was further endorsed by the five Aboriginal groups. The agreement required that high levels of community participation in training, jobs and business were conducted through all phases of project development. Within the SEMA, Diavik formalized its Diavik Communities Advisory Board (DCAB), comprised of representatives from each of the nine Aboriginal communities as well as Government and Diavik representatives. DCAB allowed key partners/stakeholders to deal with any issue creating a forum for further transparency and success (Hoefer 2004: 5).

Diavik also resolved an Environmental Agreement (EA) with the Federal and Territorial Governments and the five Aboriginal groups. Environmental concerns not covered through the EIA, such as reclamation security and caribou protection were addressed, aiming to reinforce trust, respect and transparency. An Environmental Monitoring Agreement Board (EMAB) was also established, “...comprising representatives of all of the signatories and largely funded by Diavik” (Hoefer 2004: 5).

Diavik is an example of a project built on a solid foundation of local and Aboriginal community consultation and benefits. Diavik developed “...innovative ways to contribute to local
community capacity and enhanced community transparency” (Hoefer 2004: 1). According to Hoefer (2004, p. 4) Diavik’s ‘out of the box’ approaches entailed the following:

- early and meaningful community consultation,
- Aboriginal participation agreements,
- community based training,
- significant enhancements to community,
- corporate and project transparency,
- job creation; and,
- building of local business capacity.

Diavik’s success appears to have been built with proactive policy and stringent sustainable development objectives.

Key social license characteristics that could be lessons learned from this project relate to: the importance of early comprehensive stakeholder engagement which led to an effective Participation Agreement; the acquisition of community support and consensus prior to project development; developing an understanding of culture, customs and values; successfully establishing a collaborative negotiation process, a monitoring agency and long-term development strategy.

3.10.3 Snap Lake Diamond Project, NWT, Canada

De Beers’ Snap Lake underground project, located approximately 220 kilometers northeast of Yellowknife is a unique project designed to recover kimberlite ore from a shallow dipping sill about 2.5 meters thick that slopes gently under Snap Lake. De Beers received the final regulatory approvals required for the construction of a mine at Snap Lake on May 31, 2004. Once constructed, it will be De Beers’ first mine outside of Africa and Canada’s first fully underground diamond mine. The capital cost of the project will be CDN$ 975 million. The project is accessible by a winter ice road for only six to eight weeks a year. A proposed 3,150 tonnes per day operation (1.1 million tonnes annually) will produce 1.5 million carats per year over a life of at least 22 years, beginning in the latter half of 2007 (De Beers 2007).
The Snap Lake Diamond Project Socio-Economic Agreement (SEA) and an environmental agreement (EA) were signed by the GNWT and De Beers Canada on 21 May 2004. They were developed with the participation of the following Aboriginal groups: Dogrib Treaty 11 Council, Yellowknives Dene First Nation, Lutsel K’è Dene Band, and the North Slave Métis Alliance.

The SEA was negotiated to meet the terms of the recommendations of the Report of Environmental Assessment and Reasons for Decision on the De Beers Canada Mining Inc. Snap Lake Mining Project (De Beers 2007). This was conducted by the Mackenzie Valley Environmental Impact Review Board (MVEIRB) under the Mackenzie Valley Resource Management Act (MVRMA). The report required De Beers Canada and the GNWT to negotiate a socio-economic agreement in order to minimize potential negative impacts resulting from the development and operation of the project. The purpose of the SEA is to meet the recommendations of the report. These recommendations are listed on the De Beers website (2007) and they include:

- employment;
- training;
- procurement targets;
- monitoring the obligations of the parties; and,
- establishing methods by which the parties can work together to identify and address the impacts of the project.

Brendan Bell, (GNWT Resources, Wildlife and Economic Development Minister) (2004, p. 1) states,

The successful conclusion of these negotiations reaffirms the GNWT position that sustainable development of our natural resources is essential to the long-term economic, cultural and social well being of all NWT residents...I commend De Beers Canada for making a significant and meaningful contribution to the NWT through training and development, business opportunities and ongoing social investment.

The environmental agreement calls for the establishment of a monitoring agency, composed of the four affected Aboriginal organizations, to oversee the environmental management of the project. As discussed in the above NWT examples, the Snap Lake project reaps the rewards of past negotiation and participatory approaches enabled by BHP and Rio Tinto. These techniques help to ensure cooperation, fairness, and respect, as well as support the goal for sustainable development and adaptive management in order to minimize adverse impacts.
Key social license characteristics that could be lessons learned from this project relate to: the importance of early comprehensive stakeholder engagement; the positive legacy from the earlier diamond projects (Diavik and Ekati); negotiation of a Participation Agreement, a socio-economic monitoring process, and agreement on a long-term development strategy that meets the needs and wants of the community. This case is also of relevance in being a situation where recommendations from a formal Environmental Assessment process influenced the subsequent engagement and development of collaboration for a social license.

3.11 Ok Tedi Mine, Papua New Guinea

In 2001, BHP Billiton wrote off a potential US$850M in annual revenue after giving up its interests in the Ok Tedi mine in Papua New Guinea (PNG) when the mine was believed to have had 10 years of reserves remaining (Masani 2006: 5). The mine gained notoriety worldwide for its practice of the disposal of tailings and waste rock into the local Ok Tedi and Fly River systems. According to Don Argus (BHP Chairman) (2000),

Ok Tedi is a complex issue for BHP, with competing environmental impacts and social and economic benefits. We have indicated to the other shareholders that we thought the best approach to this dilemma was to close the mine early. However, the PNG Government does not want the mine to close earlier than ten years from now which would be its economic life. We understand the reasons for its position. As a result we have come to the view that it would not be appropriate for BHP to have any direct involvement with the mine beyond the point at which all parties can agree on how best we exit (Ok Tedi 2001).

Tim Joy from the World Socialist Web Site (September 14th, 1999) states, “With 10 years of ore reserves remaining, early closure is estimated by the company to cost US$20-40 million, compared to either dredging the Ok Tedi River for US$30 million a year, or building a tailings pipeline costing US$170 million and a further US$10 million annually”. In addition to as much as 80,000 tonnes of sediment from the tailings reportedly entering the river daily with significant adverse environmental effects, the loss of revenue for the community on closure would also appear to be significantly adverse. In this situation the PNG government appears to have limited capacity to maintain the mine, or mitigate the environmental damage, as does the community. The PNG Prime Minister, Sir Mekere Moratau (September 26, 2001) stated: “It is clear that the

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6 US$850M is computed given annual production of 550,000 oz gold, 440 million pounds of copper, and assuming US$350/oz for gold and US$1.50/lb for copper.
environmental damage caused by the Ok Tedi mine is greater than expected when the mine opened and that it is now a serious problem affecting many people along the Fly River system....However, it is essential to bear in mind that any hasty and poorly planned decision to close the mine could have had even worse consequences for the well-being of these people and for Papua New Guineans generally” (Ok Tedi 2001). In this case, the government appears to be in a situation where it needs to support further degradation of the local environment to protect the livelihood of its citizens. Despite BHP Billiton being the largest mining company in the world, it is still subject to criticism for its role in the OK Tedi mine. It is relevant to examine whether BHP Billiton lost significant ‘reputational capital’ through its association with the project? If so, was it because of environmental issues and/or the social issues around potential premature mine closure and its impacts on community development? In addition to corporate social responsibility ethics, in this situation the business implications relate to the balance between the cost of losing ‘reputational capital’ and the loss of potential annual revenue?

Key social license characteristics that could be lessons learned from this project are as follows: the importance of early comprehensive stakeholder engagement which needs to include education, recognition and acceptance by all stakeholders of the long-term effects of proposed waste management practices; agreement on long-term development that meets the needs of all parties, particularly with respect to the need for a comprehensive closure plan that could financially and technically mitigate post-closure legacies.

3.12 Conclusion

The case studies illustrate the importance of some form of early comprehensive stakeholder engagement process, including NGO’s and government where relevant, that is based upon a participatory approach with adaptive and co-management strategies. These approaches appear to need to evolve into a negotiation process whereby all parties have equal contributions in providing and acquiring knowledge. Understanding legacy issues is also fundamental to project success. For instance, the Wallaby Project was plagued by past mining legacy issues and without early recognition by Placer Dome they would have faced a long negotiation process and/or possibly project failure due to the lack of a social license. The key to project and mine success in North America is the recognition of Aboriginal peoples traditional rights, title and interests with respect to the project area. This applies equally to initial consent being obtained from Aboriginal
groups to explore and develop mineral resources in their region. Without early and sustained stakeholder support evidence indicates that projects will fail. Collectively, the examples illustrate the importance of early sustainable development best practices at all phases of mine development. For instance, despite environmental degradation by riverine tailings disposal, the stakeholders (other than BHP Billiton) were concerned about the loss of development and economic consequences resulting from the closure of the Ok Tedi mine. Each of the Participation Agreements reviewed (e.g., Diavik, Ekati, Galore Creek and Snap Lake) addresses long-term community development, while preserving traditional ways of life. Business partnerships such as in the Eagle Rock Quarry Project ensure collaborative project development, as well as risk mitigation, whereby all parties are educated and informed about the risks associated with mining.

Overall, early collaboration with all stakeholders appears to be paramount. Success in the collaboration process is observed to be dependent upon commencing early and involving more than just local participants; it potentially can include NGO environmental monitoring groups, in addition to the stakeholders directly impacted by the development. It appears to be important that all participants must be fully engaged and integrated into a process built on mutual trust, understanding and shared learning.
4 IN-PRACTICE (THE WAY FORWARD)

Social License to Operate continues to emerge as a paradigm fundamental to sustainable mineral resources development. It relates to a set of concepts, values, tools, and best practices that represent the view of reality held by each participant (industry and stakeholders). It provides a forum for negotiation through which all parties involved are heard, understood and respected. The exploration phase of the mine life cycle is a critical phase because it is generally the initial contact with local communities and forms the cornerstone for effective communication and trust building. Although this research provides evidence that there appears to be a reasonable and growing awareness of social license, there is indication that its interpretation varies. Industry perceptions appear to demonstrate a desire to clarify its definition and a Best Practice process.

This chapter presents the development of a mineral exploration template titled Building Social License within Exploration, based on field studies aimed at assisting exploration personnel to establish effective communications and engagement with local communities contribute to building a social license. The template aims to provide practical assistance in conducting Situational Analysis - a process for examining and mapping a situation, its elements and their relations - in order to acquire knowledge and understanding of a project, locale and region. Situational analysis is a postmodern approach with a modified Grounded Theory framework (Clarke 2005: xxi). Grounded theory “...represents a general way of generating a theory (or, even more generically, a way of having ideas on the basis of empirical research)” (Clarke 2005: xxxi). In 1967, grounded theory was first presented by B.G. Glaser and A.L. Strauss in their book titled The Discovery of Grounded Theory. According to Christina Goulding (1998, p. 51) from the University of Wolverhampton, “The text provided a strong intellectual rationale for using qualitative research to develop theoretical analysis. It was written largely as a protest against what they viewed as a rather passive acceptance that all the “great” theories had been discovered and that the role of research lay in testing these theories through quantitative “scientific” procedures”. However, grounded theory has received criticism regarding its positivistic practices (Clarke 2005: xxi). In 2005, Adele E. Clarke pushes grounded theory around the postmodern turn in her book titled Situational Analysis: Grounded Theory After the Postmodern Turn. She states (p. xxii), “Situational analysis allows researchers to draw together studies of discourse and agency, action and structure, image, text and context, history and the present moment – to analyze complex situations of inquiry broadly conceived”. The attraction of
situational analysis as a tool within the process for gaining a social license to operate is that it offers early and comprehensive understanding of all of the factors surrounding a potential project, ‘full situation of inquiry’, going beyond just ‘knowing the subject’ to being fully situated (Clarke 2005). It forms the initial foundation for a planning process presented in the chapter that prepares for a strategy of initial engagement and consultation.

4.1 Building Social License within Exploration

In order to acquire a social license, an exploration/mining company requires a planning process that enables an early, integrated and comprehensive analysis of the political, economic, social and technological factors affecting the prospective project. Situational analysis draws upon the micro- and macro-environment in order to develop a strategy for managing risk and optimizing the socio-economic benefits to the communities. It is a means to interpret the potential social-cultural changes resulting from its development. The research survey in Chapter 2 indicates industry’s perception that in order to acquire a Social License a company needs to pay particular attention to:

- Understanding culture, customs, language, and history of the communities;
- Effective education of local communities about the project; and,
- Ensuring open communication with all affected communities (Section 3.2.3).

The template was designed around industry and stakeholder perspectives in collaboration with Placer Dome Inc. (since acquired by Barrick Gold) to serve as a toolkit to assist in the acquisition of a Social License at the exploration phase. It was designed to compliment Prospectors and Developers Association of Canada’s Environmental Excellence in Exploration (E3) program, which at the time lacked sufficient data on community engagement. The template was based on field case study analysis and UBC mining research into Social License (survey, interviews, literature reviews, case and field studies). This addressed the following questions: what, where, why and how to research in Exploration Target Areas (ETA) prior to contact; where, when and how to make contact, communicate and engage communities; and when to seek help from a specialist? It was intended to be a precursor to any pre-feasibility study, for companies to develop an integrated relationship with stakeholders. The template was structured in the following modules:

- Situational Analysis
- Research Sites
This chapter now proceeds by briefly reviewing each of these modules.

### 4.1.1 Situational Analysis

Prior to contact with communities, it is vital and logical to complete a high level evaluation of the ETA. This can be initiated with situational analysis, based upon a combination of data gathering techniques such as mass media reviews, direct field observations and interviews. Typical phases of situational analysis are: a literature review, PEST analysis, SWOT analysis, and strategy formulation for community contact, engagement and consultation (see Figure 4.1).

Situational analysis in the mine planning context is seen not only to offer a means to understand the risks associated with developing a mine in a particular area, but also to more holistically interpret potential social-cultural changes resulting from its development. In order to acquire a social license to operate, a company needs to look past traditional strategic management, and develop a philosophy that meets the needs of all audiences. This section reviews two situational analysis tools (PEST and SWOT analyses) that in combination appear to be promising tools for early use in the mine planning process by increasing the understanding of the macro- and micro-environment in which a company may wish to explore and potentially operate a mine. PEST and SWOT analyses are well-established strategic management research tools used in a diverse range of industries. They were initially designed in the 1950's to understand corporate planning trends, subsequently being integrated into MBA programs. When incorporated into the mine planning process, they can help to formulate a strategy for gaining a social license suited to the particular situation. Mine planning in this context is considered to traverse the complete mine life cycle from exploration through to post-closure.
PEST Analysis

A literature review can result in the identification, summarization, classification and comparison of important information to substantiate a hypothesis, theme or idea. In the case of PEST analysis, data from a variety of sources is obtained on the Political, Economic, Social and Technological (PEST) factors found on the ETA. The data allows for accurate assessments of the communities and settings in a region. PEST analysis guides the discovery of information about a particular locality, market or idea through questions that stimulate discussion and diagnosis of the external environment in which a company wishes to operate. It is also a tool to identify any changes that may occur from the PEST factors effect on one another. Such an ‘environmental scan’ highlights fundamental regional and local characteristics and attributes in order for the company to make an informed decision based on the diverse risks associated with exploration development in the area. PEST Analysis is based upon a grid template comprising four quadrants.
(see Figure 4.2). Political factors relating to mining development and society might include factors such as: tax policy; employment laws; and environmental regulations. Economic factors might include: trends in commodity prices, interest rates, exchange rates and inflation rates; and exploration potential. Social factors might include: cultural aspects; community demographics, resilience and economic diversity; workforce availability and skills. The technological factors (from a mining perspective) could, for example, include: mining, processing and environmental technology trends; energy and water resources; technological receptor capacity and incentives; and rate of technological change.

The PEST grid is a guide to discover information about a particular locality, market or idea. It is a method where questions stimulate discussion and diagnosis of the external environment in which a company wishes to operate. It is also a tool to identify any changes that may occur from the PEST factors effect on one another. All four quadrants are potentially interrelated and governed by socio-cultural factors. For example, the internet (technological factor) has a significant effect on all the other quadrants because of its role as a major driver of globalization. It allows people access to information to which they were once not privy. Globalization has influenced community values, beliefs, attitudes and confidence levels associated with mining, as well as their rights. These changes have empowered communities to influence the timing, direction and process of social, political and economic development in their area.
PEST can include sample questions to guide the process. A sample question from the political quadrant of the analysis might be: What is the current state of the region’s environmental law, regulations and governmental administration and what are the implications for the exploration team and its program? Such questions can be discussion points or brainstorming ideas whereby the team can collectively evaluate risk within the ETA. This process provides a clear understanding of the sources of risk, issues and potential actions needed to convert weaknesses and threats into opportunities. PEST analysis can therefore be a tool in the development of a strategy to deal with the particular project environment, and ensure corporate social responsibility.

SWOT Analysis

SWOT analysis is a subjective micro-environmental assessment of data that traditionally accompanies PEST analysis. It aims to evaluate the Strengths, Weaknesses, Opportunities, and
Threats (SWOT) of a potential exploration or mining project and team. It aims to identify the company's strengths, minimize its weaknesses, address threats and take advantage of any opportunities available. The SWOT template is also presented as a grid with four quadrants (Figure 4.3).

**Figure 4.3** A Mining Context in the Four Quadrants of SWOT Analysis

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>- ADVANTAGES OF PROPOSITION?</td>
<td>- DISADVANTAGES OF PROPOSITION?</td>
</tr>
<tr>
<td>- CAPABILITIES?</td>
<td>- GAPS IN CAPABILITIES?</td>
</tr>
<tr>
<td>- COMPETITIVE ADVANTAGES?</td>
<td>- LACK OF COMPETITIVE STRENGTH?</td>
</tr>
<tr>
<td>- RESOURCES, ASSETS, PEOPLE?</td>
<td>- REPUTATION, PRESENCE &amp; REACH?</td>
</tr>
<tr>
<td>- EXPERIENCE, KNOWLEDGE, DATA?</td>
<td>- FINANCIALS?</td>
</tr>
<tr>
<td>- FINANCIAL RESERVES, LIKELY RETURNS?</td>
<td>- OWN KNOWN VULNERABILITIES?</td>
</tr>
<tr>
<td>- MARKETING-REACH, DISTRIBUTION, AWARENESS?</td>
<td>- TIMESCALES, DEADLINES &amp; PRESSURES?</td>
</tr>
<tr>
<td>- INNOVATIVE ASPECTS?</td>
<td>- CASHFLOW, START-UP CASH-DRAIN?</td>
</tr>
<tr>
<td>- LOCATION &amp; GEOGRAPHICAL?</td>
<td>- RELIABILITY OF DATA, PLAN PREDICTABILITY?</td>
</tr>
<tr>
<td>- PRICE, VALUE, QUALITY?</td>
<td>- MORALE, COMMITMENT, LEADERSHIP?</td>
</tr>
<tr>
<td>- ACCREDITATIONS, QUALIFICATIONS, CERTIFICATIONS?</td>
<td>- ACCREDITATIONS, ETC?</td>
</tr>
<tr>
<td>- PROCESSES &amp; SYSTEMS, ETC?</td>
<td>- THREATS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- MARKET DEVELOPMENTS?</td>
<td>- POLITICAL, LEGISLATIVE EFFECTS?</td>
</tr>
<tr>
<td>- COMPETITORS' VULNERABILITIES?</td>
<td>- ENVIRONMENTAL EFFECTS?</td>
</tr>
<tr>
<td>- INDUSTRY OR LIFESTYLE TRENDS?</td>
<td>- IT DEVELOPMENTS?</td>
</tr>
<tr>
<td>- TECHNOLOGY DEVELOPMENT &amp; INNOVATION?</td>
<td>- COMPETITOR INTENTIONS - VARIOUS?</td>
</tr>
<tr>
<td>- GLOBAL INFLUENCES?</td>
<td>- MARKET DEMAND?</td>
</tr>
<tr>
<td>- NEW MARKETS, VERTICAL, HORIZONTAL?</td>
<td>- NEW TECHNOLOGIES, SERVICES?</td>
</tr>
<tr>
<td>- NICHE TARGET MARKETS?</td>
<td>- VITAL CONTRACTS &amp; PARTNERS?</td>
</tr>
<tr>
<td>- GEOGRAPHICAL, EXPORT, IMPORT?</td>
<td>- SUSTAINING INTERNAL CAPABILITIES?</td>
</tr>
<tr>
<td>- INFORMATION &amp; RESEARCH?</td>
<td>- INSURMOUNTABLE WEAKNESSES?</td>
</tr>
<tr>
<td>- SUSTAINABLE FINANCIAL BACKING?</td>
<td>- LOSS OF KEY STAFF?</td>
</tr>
<tr>
<td>- ECONOMY – HOME &amp; ABROAD?</td>
<td></td>
</tr>
</tbody>
</table>

Strengths and weaknesses include examples that pertain to company experiences, resources, originality, efficiency, competitive advantages, infrastructure, quality and staff. Opportunities and threats include examples that pertain to business alliances, technological development, information and research. An Internal Strength of an exploration company might be prior experience diamond drilling in difficult ground at depth; or expertise in workplace skills and
training. *Internal Weaknesses* for example, might be in communications and engagement with local communities. An example of a *Threat* might be the poor image of past exploration projects apparent in the region; or a high risk of volatility in government policy. An *Opportunity* might relate to the local availability of a skilled workforce; or the quality of the existing infrastructure. SWOT analysis can help turn threats and weaknesses into strengths; for example, by modifying planning, seeking training, proper exploration team selection, recruiting expertise or making alliances to add capacity. It helps establish a strategy for managing risk and adjusting planning decisions and actions. It is a potential framework for determining the key planning elements that relate to working effectively with communities.

**In-Practice: PEST & SWOT Analysis**

The following example is purely to demonstrate situational factors in a mining with communities context, in this case relating to the Yanacocha mercury spill. It is important to recognize that this is also in the context of hindsight (see Chapter 3 for further details). The factors illustrate how the spill represented a force of change, affecting the relationship between a mine and its communities.

**PEST factors:**

*Political:* Students at a local school were rewarded academically for collecting mercury. This reflected the significant value given to mercury within the locality. The company paid five times the normal rate per kg to recover the mercury, elevating its value and altering the economic base of the locality. Inflation occurred on basic goods and services as a result of paying such a high rate for the return of mercury.

*Economic:* The value of mercury was also high within the locality because of the lack of employment other than artisanal mining.

*Social:* The local people used mercury for spiritual and medicinal purposes. This increased the value of mercury, as well as making it difficult to educate the people on its health hazards.

*Technological:* The local people rely on mercury to extract gold from ore with no alternative to traditional artisanal mining techniques.

**SWOT factors:**

*Strength:* Internal company capacity existed to educate and train local people on the hazards associated with the use and handling of mercury. The company was committed to community
Inadequacies in communication between the company and communities (who could have participated in the design of a mercury safety program) were apparent.

Opportunity: There was an opportunity to train and educate local people on the hazards of mercury and build credibility through attention to safety.

Threat: The lack of understanding and appreciation for specific community values, customs and beliefs placed at risk the maintenance of a social license.

In hindsight, a situational analysis could have prompted a greater awareness of the local attitudes and practices towards mercury and its value, both technically and socially, to the community. Newmont's response and actions in relation to the spill might well have been different had they understood in advance the particular significance of mercury in the community, its social beliefs and technological constraints. Classifying such information simply demonstrates the principle of situational analysis, which would be undertaken in the context of early mine planning rather than in back-analysis. The intent is not to pass judgment on what was an unfortunate incident with social license implications. The success of situational analysis will be judged more realistically in the future after the onset of project development, in terms of whether risks are effectively identified beforehand and managed.

4.1.2 Literature Review Research Sites

The second section of the template lists potential resource sites for ETA research. There exist numerous low cost resources on the internet to assist in conducting research on communities, stakeholders and Aboriginal peoples within an ETA. These resources include: internet sites, publications and articles. For example, one excellent reference of up-to-date Country Briefings is: The Economist Country Guidebook. It is important to verify or validate the information prior to its use by using numerous resources as reference.

4.1.3 Team & Strategy Development

The creation of a company/consultant team, prior to contact with the communities in the ETA, is a key part of situational analysis, particularly SWOT analysis because internal analysis of

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7 The Economist Country Guidebook is found 01 August 2007 at: http://www.economist.com/countries/?CFID=62895709&CFTOKEN=593e2db-10f9938b-b497-46e6-92ff-7222e368e641.
strengths, weaknesses, opportunities and threats of potential members on the team is vital to project success. It is important that they transition and 'fit' within the cultures found in the ETA. Preliminary research is important in preparing the team for effective community consultation (Nelsen 2006).

The team should consist of company representatives, as well as consultants who specialize in the socialization of planned exploration activities. "Employing trained professionals to consistently and continuously manage a social program can increase a company’s credibility with local people and its success in community relations" (Sweeting et al 2000: 49). The overall objective of the team is to obtain an understanding and alignment of perception amongst stakeholders, as well as acquire support to facilitate exploration activities. These objectives build and strengthen the internal capabilities of the company, thereby providing the 'optimum' response to community needs and project viability.

Many factors must be taken into consideration when building the exploration team, including the appointment of a Community Development Officer (CDO) who can help organize, develop and implement successful community development programs. These can account for community relations, dependency, and resiliency, as well as the suitability (needs of the community) of the development projects in the ETA. The program should include a Community Consultation Program (CPC) which is fundamental to developing the overall relations between the community members and the exploration team.

The acquisition and retention of 'specialists,' is also vital to project success. Company representation should remain constant and consistent with respect to communications and team members. Disruptions caused by frequently changing team members can result in mistrust, animosity and confusion amongst community members regarding the exploration project and team. Team strategy is important because it encompasses cultural sensitivity and awareness. Team members must clearly understand the cultures (number, history, complexity etc) that they will be encountering. This awareness allows for the identification of any predetermined biases. Cultural awareness is the first step to understanding the beliefs and values of the communities and Aboriginal peoples that you would like to work with.
An example of a project team development template may include the following:

- What type and how many specialists are needed?
- Does the project have a high degree of socialization issues?
- Were there PEST indicators that were ranked high, hence requiring a specialist to be involved with the project?
- Is there high community vulnerability rather than resiliency as illustrated through an initial PEST Analysis?

4.1.4 NGO Relationships

Recent worldwide trends have created the setting for various forms of stakeholder partnerships, collaboration and management of natural resources as evident in earlier chapters. Since geologists (seen as company ambassadors) are the first to contact stakeholders and Aboriginal peoples, their roles are paramount in shaping the legacy that is left behind. Sustainable community development is vital to project viability, positive corporate/community relations and legacy. In order to enhance a project’s viability ‘first contacts’ with stakeholders and Aboriginal peoples must be built by informed company representatives who understand the PEST indicators found in the region. The verification of these indicators, supported by ‘first-hand knowledge’ of the communities in the area could be facilitated significantly by NGO representatives. It appears that it should be considered that NGOs should be contacted if applicable prior to contact with communities. Recent trends illustrate that contact with NGOs prior to community involvement builds alliances and relationships that sponsor sustainable project development. Polaris Minerals Corporation, for example, contacted the local NGO on Vancouver Island prior to making contact with the communities and Aboriginal peoples within the ETA (Romero 2005). This action fostered a relationship built on trust between the NGO and company, facilitating the understanding of the situational analysis indicators found within the ETA.

NGOs range from large charities such as CARE, Oxfam and World Vision to community-based self-help groups. They also include research institutes, churches, professional associations and lobby groups. Project success depends on partnerships with NGOs that encourage cooperation among all stakeholders and Aboriginal peoples. The community must be involved in choosing, approving and determining the direction of the specialist’s or NGO’s work or involvement with the project. It is vital that the NGO has the capacity, resources and experience in order to fulfill
and produce the results expected by all stakeholders and Aboriginal peoples.

NGO participation can be vital in community-based planning and development. In many cases, NGOs may already be involved, ensuring participation by minorities from within the community, as well as being involved in programs such as participatory rural appraisals, community mapping and historical reviews of land quality, use and productivity (Breuer and Farrell 2000: 2).

Historically, many mining companies waited to contact NGOs after contacting communities from within the ETA, perhaps hoping they would get involved. Midstream project contact with NGOs adds significant risk to project development and ultimately its success. However, recent trends illustrate that contact with NGOs prior to community involvement builds alliances and relationships that sponsor sustainable project development, not the opposite (e.g., Polaris Minerals Corporation, Placer Dome Inc).

The template provides a reference list to assist in the NGO selection process. It can help to determine; what is an NGO, who are the NGOs and how to identify an NGO and whose capacity and orientation match the corporation’s values and needs, and is willing to collaborate on a specific project. It also provides sources on how to find an NGO if one is not located or working in the ETA, as well as where to find one that meets the needs of the community and corporation.

### 4.1.5 Community Resilience

Community resilience is a measure of the adaptability and vulnerability of a community when faced with change. It is important because potential unforeseen risks can be mitigated by understanding the adaptability of the community. Table 4.1 shows the characteristics of a resilient community.
<table>
<thead>
<tr>
<th>Infrastructure Characteristics</th>
<th>Social Infrastructure Characteristics</th>
<th>People Characteristics</th>
<th>Conceptual Characteristics</th>
<th>Problem-Solving Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diverse Economy Gathering Places</td>
<td>Social Support Commitment Pride</td>
<td>Open-mindedness Flexibility Honesty Positive attitude Future-oriented Willingness to change</td>
<td>Proactivity Creativity Ability to utilize networks Sense of togetherness and community</td>
<td>Transparent collective process for decision-making Supportive community-elected council</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Presence of visionary leaders and supports Access to resources and knowledge Ability to act interdependently</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Modified after Kulig et al 2005: 62)

The recognition of community vulnerability or resiliency can be a catalyst for positive change in the mine life cycle. Programs can be developed early on (exploration phase) to foster linkages and partnerships between all stakeholders, and Aboriginal peoples, thereby avoiding potential divisions amongst groups. It is important to understand the community’s risk factors, in order to develop a strategy that benefits their well-being and livelihood, while respecting their culture, customs, beliefs and values. Some sense of a resiliency index gives the company a clear understanding of the potential ‘footprints’ that could be left behind by their contact with communities. The template provides a reference to a toolkit that lessens uncertainty with respect to project strategy and development. It allows geologists in such early engagement to understand community risks, adaptation and competency in order to build effective consultation programs.

### 4.1.6 Consultation

A culture of misunderstanding, mistrust and animosity between a community and a company has been observed to ultimately lead to conflicts and problems, such as delays in the permitting process, disruption or the cessation of operations, poor public perception and no social license. It is important that a mineral exploration team make an effort to understand and respect the communities they contact. A long-term commitment must be made to consult and listen to the communities. The exploration team should demonstrate a willingness to talk with the affected
communities, showing a genuine desire to hear the local ideas and aspirations, whilst being careful not to make commitments that are unlikely to be met. To do so, an effective consultation program needs to be implemented early for project success. The template provides a reference to a guide on an effective community engagement and consultation. “Early comprehensive engagement with all key external stakeholders on the environmental, social, and economic impacts of a proposed mine will help identify potential problems and their possible solutions. Without this detailed level of engagement, problems can ensue” (BSR 2003: 6).

4.1.7 Community Indicators
It is evident that it is important to always be aware of a community’s response to your actions. Experience from field geologists indicate that an ongoing review of community, stakeholder and Aboriginal people’s feedback is vital to project success. For example, culture, personalities, language, and other communication barriers may inhibit direct feedback from community members. It is important to be able to listen carefully and ‘tune out’ irrelevant noise, as well as have the ability to correctly interpret clues before you. Community indicators are everywhere and companies must recognize and rapidly respond in order to mitigate their potential negative influence on project success. The template was designed to provide a reference to potential community indicators. In summary, it is of paramount importance for the exploration team to always be cognizant of the communities’ response to their actions. Since many responses may be implicit negative reactions, it is important to be aware of the constantly changing environment in the ETA.

4.2 Summary
Industry in general is becoming well aware of the need to earn the support of communities around potential exploration activities and the concept of Social License as a part of Corporate Social Responsibility. The use of situational analysis (PEST and SWOT) is a logical means to provide exploration and mining companies with the foundation from which to build a strategy for the acquisition of a social license. The exploration template reviewed in this Chapter was developed in consultation with Placer Dome Inc. The preliminary use of the PEST and SWOT tools within an exploration template has been seen to provide a basis to establish where to begin, but more importantly to identify and define how to move forward, ensuring fully engaged and committed participation by all stakeholders.
5 DISCUSSION

Social license appears to have become a critical success factor in mine development that needs to be integrated into mine planning. Evolving public perceptions have driven the need for mining and exploration companies to earn a social license. Negative legacies such as mine disasters, abandoned mines, closures, environmental disasters, as well as social impacts created from exploration and mine development have left communities questioning a corporation’s ability to manage local resources. Communities are looking to be understood and respected and this is obtained through effective negotiations and partnerships with companies who have ‘reputational capital’, and who can meet the requirements of the community’s social license. In return, companies acquire options and flexibility to develop projects locally, as well as worldwide.

This chapter briefly summarizes the outcome of the research in terms of the need for a social license, how to earn it, and the limits of social license. A model of Social License based on real options concepts is then presented. Broadly speaking, this chapter discusses the cost and value proposition of social license.

5.1 The Need for a Social License

The following section briefly discusses the importance for companies/projects to acquire a social license.

5.1.1 Reputational Capital:

A positive corporate reputation is vital to project success. Social license provides ‘reputational capital’. Company after company have come under scrutiny and criticism at one time or another; however today’s public values for a positive reputation has given companies in the mining industry something more to think about. With a long legacy of mining throughout the world, combined with the negative connotations of mine closures, spills, disasters, as well as numerous social issues, companies are learning to rebuild their ‘reputational capital’. Lassonde (2003a: 9) states,

When we find and develop a new ore body, we undoubtedly have an irreversible impact on the lives of those surrounding the operation. Before they let you in, they will want to know your record on the stewardship of the environment, on helping communities through development program training, employment, schooling and other local opportunities. This is what we call social licence. In other words, are you going to be a good neighbor or a bad influence?
‘Reputational capital’ allows access to future profits, development approvals, preferred access to prospective areas, the ear of government, the trust of regulators, and the tolerance of local communities and NGOs (Gunningham et al 2002: 12). “Reputation carries with it credibility, such that the up-front costs and risk associated with gaining social acceptability are reduced” (Joyce and Thompson 2000: 53). Building ‘reputational capital’ is a good economic investment and it allows companies to have far greater control over their own destiny. ‘Reputational capital’ also benefits the industry as a whole. With the worldwide exchange of information via the internet, the industry is faced with the stigma of bad legacies by a mere few companies. When mines are abandoned the responsibility presently defaults to government and the public taxpayer, with the industry paying little or nothing except in reputation (social license). Each and every company is an ambassador for the entire industry, hence making ‘reputational capital’ a vital tool to counteract negative public perceptions.

5.7.2 Limit Company Future Legal Liability:
Having a social license and maintaining it will limit company future legal liability. “Two decades of tightening regulatory rules and legal threats have led many business people to assume that any hazards and harms that their enterprise engenders, even if not clearly illegal today, will sooner or later be subject to public censure, government action, and legal liability” (Gunningham et al 2002: 1). Processes that involve full community support, knowledge and engagement should limit or reduce the likelihood of future adversarial legal repercussions as all parties were knowingly involved.

5.13 Save Companies Money
Practicing social license principles allows companies to mitigate unnecessary costs, such as the loss of ‘reputational capital’ and revenue. NGO’s can exert pressure on a project through negative publicity in an attempt to impose informal economic sanctions. “Bad publicity generated by carefully staged media events, such as protestors chaining themselves to pulp barges, or staging public protests in head office, can impact directly on corporate image and sales, and indirectly on share prices and access to investment capital” (Gunningham et al 2002: 28). A social license along with being a good corporate citizen will swing the balance of doubt in favor of the corporation as it will be thought of as credible, honest and ‘reputationally’ upstanding.
5.1.4 **Investors are attracted to Social License to Operate**

Social license is attractive to investors because the benefits of having a social license include increasing long-term shareholder value. In the context of sustainable development, by integrating economic, environmental and social growth opportunities into their business strategies, companies should be able to attract investors who have become attracted to ethical funds, as well as minimize opposition to projects which can lead to problems with regulatory or political authorities. Problems with a project can have an impact on a company’s overall reputation, hence negatively affecting its share price or hindering its ability to access or finance new projects in other parts of the world. It seems logical to conclude that the loss of ‘reputational capital’ can linger for many years. Evidence clearly suggests that projects that face delays, disruptions and closures because of the mishandling of community relations can suffer a significant loss of value.

5.1.5 **Limit the Length of Time to get Permits and Licenses**

Acquiring a social license is vital to limiting the length of time for companies to acquire project permits and licenses. For example, Manhattan Mineral’s Tambogrande project did not proceed because they did not obtain their social license to operate. “This in turn translates into a nervous central government and long delays in permitting” (Lassonde 2003(b): 3). Teckcominco’s Pogo project received final approval from their permitting process three years and nine months after their start date (see Chapter 3). This is an exceptional timeline for acquiring final permits for a mining project in the United States. Without an effective community consultation program, one might speculate that they would have faced a long permitting process, or even a halted project.

Since social license is monitored and enforced by a variety of stakeholders the company must comply with a variety of other license terms (economic, environmental, regulatory and political). For instance, if a company fails to meet social license requirements, then a tightening of its regulatory license through the permitting process might conceivably occur. The Pogo Project described earlier illustrates how obtaining a social license can mitigate potential delays in the permitting (regulatory) process. In a sense, a social license relies on the tangibility of other licenses having been obtained by the company involved.
5.1.6 Changing Public Perception

It seems logical to expect that public perceptions of a potential mining project could be changed with the acquisition of a social license. For instance, public sabotage of a project is a prime example of a negative indicator and the project’s lack of a social license. Meridian Gold’s Esquel project was halted when a group of radicals faked an illegal dump of supposedly dangerous material to erode the company’s credibility and stop the project (Lassonde 2003b: 3). Despite the fact that this incident occurred, the future of the project was in question because the stakeholders illustrated earlier dissention by voting 90% in a popular vote against the project. Perhaps an effective consultation program (earning a social license) could have mitigated this incident. Luc Zandvliet (2004, p. 1) states, “Companies generally respond immediately to threats, sabotage, and blockages; but not to letters and verbal complaints. Peaceful behavior is not rewarded, violent behavior is. When companies only respond to negative triggers, they can be sure these triggers will occur”.

According to Lassonde (2003b, p. 2), “Belief is the cornerstone of our Social License”. Who does one believe: the companies, the NGO’s or the experts when being approached to talk about project development? Stakeholders tend to be inundated by information when a project is being investigated or developed in their region. In many cases, stakeholders have not had prior experience with this process, hence rely on people or organizations that speak in layperson terms or live in their communities to explain the project process to them. There is a natural reluctance to not trust mining companies. It is vital for companies to become ‘situated’ within the region they are trying to explore or develop, as a means to develop trust and credibility between the company and stakeholders. Knowledge and education regarding the exploration and mining processes are important tools to building stakeholder capacity. This allows stakeholders to make well-informed decisions regarding the project.

Myths are propagated by a variety of different groups who may have personal interests in

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8 Results from 12 field visits to Indonesia, Nigeria, Nepal and Myanmar by Luc Zandvliet during 2.5 years through the Corporate Engagement Project titled Redefining Corporate Social Risk Mitigation Strategies: How to engage with stakeholders in areas with high social or political tensions (Zandvliet 2004). He made contact with 60 companies operating in difficult environments. Available online at: http://lnweb18.worldbank.org/ESSD/sdвест.nsf/67ByDocName/RedefiningCorporateSocialRiskMitigationStrategies/$FILE/CPRNote16CEP.pdf
acquiring readership, votes or money. Globalization has attributed to the growth and spread of myth-making. According to Lassonde (2003b, p. 3), “The entire planet is everybody’s backyard. Reputations can be made or lost far more quickly in this environment, which makes establishing a social license to operate even more imperative”. Myths exacerbate fears, whereby people could be misguided to make irrational decisions.

Public impressions are a significant issue in the mining industry. Open pits are perceived as environmental problems, leading the casual observer to make judgments, and making it more difficult for mining companies to earn a social license to operate. Impressions can be very influential in determining attitudes towards mineral resources development. The visual impression of an open pit mining operation and the associated tailings and waste dumps could possibly misguide the viewer in terms of the relative scale of an actual mine footprint. The actual footprint of the Mountain Pine Beetle infestation in British Columbia is currently far larger than all the mining operations in the province, as shown in Figure 5.1 where none of the 50 largest (metal, coal and industrial) mines or their environmental effects can be seen on this small scale of imagery, but the scale of damage caused by the Pine Beetle is highly visible.

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Negative publicity has significant power to rapidly change corporate strategy, as well as the adoption of social license principles. For instance, Neil Gunningham, Robert A. Kagan and Dorothy Thornton wrote in their article titled *Social License and Environment Protection: Why Businesses Go Beyond Compliance* (2002, p. 25-26) that negative publicity is particularly potent to most pulp mills in Canada. In the Province Newspaper, an “environment scorecard” was published outlining environmental performance indicators and major infringements of regulations on Canadian pulp mills (Gunningham et al 2002: 25). The scorecard “…was seen as a “pretty effective tool” - if you have recurring environmental problems you come up on the list – it keeps you in compliance because public pressure is more demanding than the regulatory agencies. …agencies are more forgiving. …The extent to which a company complies with regulation is also used by community and environmental groups as a performance indicator by which the community judges compliance with the broader social license”.

### 5.1.7 Acquire Community Support

A mining company will most likely acquire long-term support from people affected by its activities if it maintains its social license through effective consultation processes. As discussed
in Chapter 3, Teckcominco’s Pogo Project is a prime example of how long-term community support appears to be able to facilitate project permitting processes.

5.1.8 **Getting the Right Employees**
A ‘conflictual’ project can have negative effects on employee morale or create difficulties in attracting the best employees. Creating an organization with a corporate culture that follows social license principles will attract employees who are likeminded. Patrick James (former President & CEO Rio Algom Ltd) (2000, p. 8-9) states, “...a common approach is needed for developing Social Licence, and it must be an approach that our employees and stakeholders buy into from the beginning.”

5.2 **How to Earn a Social License**
It appears to be evident that in order to be the partner of choice, mining companies must build a corporate strategy which involves social license parameters. This section briefly summarizes how to earn a social license, as well as how to incorporate it into the company’s mandate.

5.2.1 **Start at the Exploration Phase**
Exploration is the first phase to make contact with communities and stakeholders. Being prepared with a strategy and negotiation process will allow for a first good impression.

According to Dorothy Kosich from Mineweb (February 16th, 2004), Metallica Resources’ Cerro San Pedro Gold/Silver project in Mexico is seen as a project that has earned a social license to operate. They acquired this declaration from their extensive community consultation during the exploration phase. Kosich (2004) states, “Several years before a shovelful of dirt has even been turned on the site of the Cerro San Pedro Gold/Silver project in Mexico, Metallica Resources and its former partner Glamis Gold worked hard to achieve community’s trust and confidence”. It is important to recognize in planning a mine development that the exploration team is charged with making and leaving a long-term favorable impression and legacy for those who follow in the subsequent mine life cycles.

5.2.2 **Define who the Stakeholders are**
It is not the company who nominates the project stakeholders. It is the affected person or group of people themselves who decide. By notifying the people within the locality, as well as the
region, about the project it is possible to facilitate the attendance of a diverse collection of people at meetings with communities. For instance, Manhattan Minerals working in the San Lorenzo Valley decided that the promised Tambogrande mine would not affect the agriculture in the region (BSR 2003: 7). In the end, the company did not give the dialogue with the farmers high priority and ended up with a group of stakeholders (NGOs, ENGOs) who were most opposed to the project.

5.2.3 Educate Stakeholders about the Project and Company

Education involves informing stakeholders about the project and key aspects that the stakeholders may not be familiar with, such as the use of cyanide or mercury during the mining lifecycle (see Chapter 3). Stakeholders’ primary concerns are how these elements affect the environment, as well as how they may affect their livelihoods. Building stakeholder capacity by identifying and addressing such primary concerns has been shown to be vital to project support and success.

5.2.4 Implement an Information Feedback System

Implementing an information feedback system has been shown to allow for the distribution of information from stakeholders back to the company regarding their responses and reactions towards the project or the company itself. Sometimes in certain areas, contemporary consultation programs may not work because of stakeholder culture, values and/or customs. Companies may have to design a program whereby stakeholders can express their ideas and/or thoughts that are not inhibited by their culture, custom or values.

5.2.5 Implement an Informal Consultation Program

Informal consultation/meetings are evidently a best practice start to familiarization with stakeholders affected by a project. This ‘informality’ allows for all parties to discuss casually the project, the company and any problems that may arise.

5.2.6 Design a Public Consultation Program Prior to Contact with Stakeholders

Public consultation entails a more formal two-way communication between the company and stakeholders. It is carried out to avoid costly conflict, to anticipate unforeseen situations, to generate public support for a project and to gain genuine credibility for the proposal. Any engagement process will involve a range of levels of participation for different stakeholders,
depending on the issue to be decided and the capacity of the stakeholders to engage.

5.2.7 Delegate Authority to Stakeholders
Delegating authority for some of the decisions to the stakeholders on certain aspects of the project will assist in the identification of stakeholders, as well as their interests. For example, stakeholder mapping and analysis, as well as community appraisal are two key tools that will help companies identify important actors and what their interests are.

5.2.8 Decision Making and Conflict Resolution
"Effectively resolving differences in difficult situations requires a process that promotes joint identification of the goals of the process, the issues to be resolved; the mechanisms to be used to resolve the issues, and the incorporation of cultural differences (BSR 2003: 13). As identified in Section 4.1.7, the ability to effectively identify and resolve issues that cause conflict can mitigate potential project delays and disruption.

5.2.9 Sustainable Community Development
Promoting a community-centered development process where the community is integrally involved in the design, implementation and management of its own development leads to a more sustainable venture over the long term. The community builds capacity and is better prepared later as a sustainable community once the mine closes.

5.2.10 Transparency
Transparent disclosure of information early on in a project allows for an effective dialogue and resolution of potential stakeholder concerns. It also helps to establish trust and support for the project. Transparency will also engage communities, and allow for better cost management by building trustful business relationships. Transparency has been a recent phenomenon to emerge in the mining industry which has traditionally been somewhat secretive in nature in seeking competitiveness, particularly in the exploration phase. Many mining companies are now routinely disclosing information to shareholders through sustainability reports and public websites; however stakeholders who may not have access to this mode of information transfer seek innovative methods to acquire such information. The use of bulletin boards, radio broadcasts, newspapers, and/or an information booth will allow a forum for stakeholders to
acquire knowledge about the company and project. Veiga et al (2001, p.192) state, “Communication between the mining company and the community must be transparent and effective: citizens should be encouraged to share in decisions that directly affect their futures; this will help mining companies avoid risks to the sustainability of both their own operations and the community”.

5.2.11 What do communities want?

Patrick James (2000, p. 12-13) described a mining executive’s perception of what communities want from exploration and mining companies who enter their region to develop a project. He states,

Recently, a young man in Chile solemnly explained to me what communities in his culture expected from companies like ours. It was quite interesting because it was almost word for word what communities in Canada, U.S., Kazakhstan or Peru expect. The list includes up-to-date information on the progress of the project, honest answers to questions, discussion of and input into, development alternatives, true concern for the environment, sensitivity to the local culture, opportunities for their citizens to earn a better living, and a better life for their children and most of all, they expect to be treated with respect. Isn’t that what we all want?

5.2.12 Recognition of Positive and Negative Indicators

Recognizing negative indicators is fundamental to the identification of stakeholder cues that something is going wrong or that company/stakeholder relationships are negative. The lack of recognition of negative indicators as illustrated above in Meridian Gold’s Esquel project example can lead to sabotage of a project site, hence delaying or halting the project. Other examples of negative indicators are: community leaders and elders stating that they do not feel respected, as well as community members are relying on 1 to 2 project team members to convey their concerns. Positive indicators include: written letters supporting the project (e.g., Eagle Rock Project), as well as positive press in local and national newspapers.

5.2.13 Social Consensus

In the twenty-first century, social license requires an unprecedented corporate commitment to build a social consensus. A corporation’s ability to achieve consensus requires serious treatment of every stakeholder group’s considered opinion. Once obtained, project success is more imminent (for example, see Teckcominco’s Pogo Project, Chapter 3).
5.2.14 Environment and Conservation
Sustainability and conservation are considered to be factors in maintaining a social license. Corporations who implement innovation, alternative methods, as well as recycling into their corporate strategies, mine designs and public consultation will be more favorably viewed by stakeholders who favor less environmentally invasive methods. It is apparent from this research that a company in tune with the strengthening environmental and social movements will be selected (over companies who are not) for viable, scarce projects in risk neutral zones worldwide.

5.2.15 Safety and Environmental Track Record
A positive safety and environmental track record enhances the acquisition of a social license. Companies with positive records are more likely to be chosen by stakeholders to develop a project in their region given that it reflects positively on how a company treats its employees, the environment and those around them. A positive record shows a genuine concern for the well-being of affected persons rather than a profit at all costs rationale.

5.2.16 Brand Values
Positive brand values are becoming a new approach to demonstrating responsibility in the mining industry that potentially can assist in obtaining a social license. Diamond companies in particular are being required by purchasers to legitimize the origin of their diamonds. For example, purchasers may seek Polar diamonds (from northern Canada), rather than blood diamonds mined from war zones and sold to finance an insurgent, invading army's war efforts. NGOs “...seek to influence consumer preferences, sensitizing them to the environmental [and social] consequences of the products they buy...” (Gunningham et al 2002: 29). This can result in consumer boycotts and lost revenue for the company. A positive and recognizable brand value will assist in the achievement of a social license even prior to the engagement process. Knowing that a strongly responsible and reliable company is seeking to engage with a community should alleviate fears founded on distrust from the onset.

5.2.17 Going Beyond Compliance
Many companies are going beyond environmental, legal and regulatory requirements in order to obtain a social license. Companies are looking for ‘a margin of safety’ against violations, building upon their ‘reputational capital,’ as well as are looking to be favored over other
companies for project development. Mining companies have attempted to improve their environmental performance through the adoption of codes of good practice, environmental management systems, environmental charters or other forms of voluntary initiatives (Sandbrook and Mehta 2002: 7). However, some industry opinion may feel that these approaches have been motivated through the threat of regulatory follow-up (Gallinger 2005). For example, the International Cyanide Management Code is one of those approaches whereby if there is not industry compliance then the ability to use cyanide in the extraction of gold will be lost. One viewpoint is that in most cases, when “...regulatory systems are weak and basic principles of good governance are not in place, the role of business in ensuring sound environmental and social practice gains added importance” (Sandbrook and Mehta 2002: 7).

5.2.18 Institutional Participation
There is a growing importance for local and regional government’s intervention in social strategies of mining companies in developing countries. Increasingly, mining companies are providing health and medical services within the ETA at a level beyond the country norms. At times, the company has ‘stepped into’ the shoes of government at the local level because of its superior access to resources. For example, Placer Dome Western Aires Joint Venture started the South Deep Care Project in 1999. The projects mandate was to help 2500 mine workers who were recently laid off to become economically active. It also supported miner workers and communities coping with HIV/AIDS. In 2002, the Care Project received the prestigious World Bank Development Marketplace Award. At times, the ETA has a greater trust of the company and its ability to provide essential services than what may be in some circumstances corrupt government officials who may misappropriate funds for their personal well-being. Current thought is that mining companies can help to develop these areas, however it should not be implied that they would replace the government in these roles. “Therefore it is especially important to focus on strengthening the capacity of national and local governments to design and enforce regulations” (MMSD 2002b: xxiii).

5.2.19 NGO Partnerships
A company partnership with an NGO can provide the following benefits: strong grassroots links; field-based development expertise; the ability to innovate and adapt; process-oriented approach to development; participatory methodologies and tools; long-term commitment and emphasis on sustainability; legitimized relationships with stakeholders; offsetting of conflicts with other
NGOs; and cost-effectiveness. Joyce and Thomson (2000, p. 49) state, “External verification by these organizations of a company’s activities and claims for compliance with social, economic and environmental standards can often become an essential part of earning a Social Licence to Operate”. Overall, the partnerships could increase the company’s ability to acquire a social license, see Section 3.5 and 4.1.4, Polaris Minerals Corporation.

5.2.20 Balance of Benefits to Stakeholders

The balance of benefits amongst stakeholders is vital to positive community relations, the acquisition of a social license and project success. In order to be successful, a community relations budget should be designated to a committee comprised of stakeholders (Community, Company, NGO etc). The budget should be designed for infrastructure projects, compensation and enhancing skills and future business development. The Ekati Diamond Mine, Diavik Diamond Mines and the Snap Lake Project in the Northwest Territories, are examples of how committees or agencies are successful in balancing the distribution of benefits to stakeholders, see Section 3.10.

Hiring community members as employees or contracting them for the development of a project is important in that a local content policy is developed to ensure balance in the distribution of benefits for local communities. It might be realistic to assume that a social license will never be earned if the local community can not participate fairly in the economic benefits of the project. It is sensible to consider that such a policy needs to be mandatory and enforced.

There is naturally a fine line between buying the will of the people (e.g., through the offer of better drinking water) and trying to earn a social license. The provision of drinking water, although a benefit, does not provide long-term economic certainty or skills required to generate long-term economic certainty, hence may be viewed as only a small step towards building a social license.

5.2.21 Visual Impression

The first visual impressions of the site/project by stakeholders are important to achieve project success. Things that need to be taken into account are: the extent of the need for security personnel (military, police, and other security members); if they should be in uniform and if the
number is proportionate to the situation; and, the cleanliness and organization of the site. Other things to consider are: the location of where staff reside (it is important they stay within the local community); and, how equity can be established between the relative difference in the quality of life between the company compounds and adjacent communities? A heavily fortified project with paramilitary style enforcement conveys a distinct lack of equity and rights to the local population. How can the reality of relationships be developed to prevent segregation and alienation of the local community from any community of mine management or expatriot employees?

5.3 The Limits of Social License
This section briefly discusses the limits of social license and its application in the mining industry.

5.3.1 Need to Maintain your Social License Daily
It is evident that Social License has to be maintained daily by achieving responsible social and environmental performance, as well as by developing on-going, positive relationships built on trust and respect with stakeholders. When companies do not engage with communities on a long-term basis, it appears that one consequence is that communities pressure companies in order to obtain short-term gains. “We have to continuously convince the public that we have the right to exist” (Gunningham et al 2002: 10). Because social license relies heavily on reputations, one bad experience can undo years of hard work. Trust is hard to build, but easy to lose.

5.3.2 Problems for Junior Companies!
Junior companies have limited financial resources. Much of the social license investment must be spent upfront prior to any revenue being received, making it difficult for smaller companies who have smaller balance sheets to develop projects. However, as illustrated throughout Chapter 3, junior companies such as NovaGold Resources and Polaris Minerals Corporation are being recognized by their peers, as well as by project stakeholders as companies who have earned or are close to earning their social license. Smaller companies may not have the fiscal resources; however they should have the capacity to develop leadership and dedication towards acquiring community support and approval through effective consultation and social license parameters.
5.3.3 Variation in the Terms of the Social License

The diverse nature of the communities encountered in this research indicates that the characteristics of each community can be distinctly different, particularly in terms of their geographical location, political, economic, social and environmental situation. As each local community is different from one another, "...so too will the strength and terms of a social license" (Gunningham et al 2002: 30). It is important to recognize and tailor social license programs to the specific needs and wants of the ETA. It is quite conceivable that a small company cannot meet the financial demands of a social license program defined by stakeholders. However, a properly earned social license will ensure that the social programs and costs are balanced with respect to the capabilities and economics of the project and company. A responsible engagement process should aim to ensure this proper balance for the sake of sustainable mining.

5.4 A Real Options Model of the Social License to Operate

Integrating some form of modeling into mine planning that accounts for social license would be useful to the industry and its communities. This would be valuable in assisting in further understanding and communicating its context, possibly ultimately leading to the future ability to quantify and measure it from a cost-benefit perspective. This section discusses the exploration of the concepts of a model of Social License based on real options principles.

A real option provides its owner with the right, but not the obligation, to undertake a business decision involving a tangible asset. A real option is analogous to a financial option which allows its owner to buy or sell financial assets such as stocks or bonds. The characteristic feature of an option is an asymmetric payoff or profit. Thus for a small investment one conceivably obtains the opportunity for significant gain.

Development of a mine can be viewed as an option on a tangible asset – the resource in the ground. From the cost of developing the mine, the owner obtains the opportunity to profit considerably by extracting and processing ore to produce metal. The profit diagram shows the principles in Figure 5.2. Here the mine owner spends D per unit to develop the mine and extracts and processes the ore at a unit cost X to yield a profit P-X, where P is the current unit price of the metal. This is analogous to a call option on a stock (a stock option) where the owner spends D
per share to buy the option to purchase shares at price $X$ when their price $P$ exceeds $X$.

**Figure 5.2 Profit from Options on a Mining Project**

Social license can now be seen as an increment $L$ to the unit cost of development, that is the mine owner spends $D$ to develop the mine and $L$ to carry out procedures such as engagement and involvement of the community to acquire a Social License. Given the license and having done the mine development, the owner has the right to exercise the option to extract and process ore provided the unit price exceeds $X$.

Normally the profit (the upside) is much greater than the loss if extraction does not proceed (the downside) and this provides the incentive to explore for and develop mines. Given actual values of $D$, $L$ and $X$, and a model of unit price variation, it is possible to compute a net present value of the mine development option, see for example Copeland and Antikarov 2001; Luenberger 1998. Different values of $L$ would result in different net present values which might provide a guide to the maximum amount of spending that is justifiable for the Social License. However, aside from the difficulties of estimating $D$ and $X$ and of determining the correct price model, it would be very difficult to assign a limiting value to $L$. 
Wang and de Neufville (2005) distinguish two types of real options: those “on” projects, and those “in” projects. Real options “on” projects are mostly concerned with the valuation of investment opportunities, while real options “in” projects are mostly concerned with design flexibility. The option depicted in Figure 5.2 is an example of an option “on” a project. A similar example is where a specific amount of money is spent on a project by a joint venture partner prior to a certain date in the future in order to acquire an interest in the project. This is used extensively in the mining business to earn an interest in an exploration project which could result in significant upside or payback in the event of exploration success.

Real options “in” projects imply a degree of flexibility inherent in the design of the project to accommodate changes in the future, changes not necessarily evident today. An example of a real option “in” a project is the Bentall 5 office tower in Vancouver. Originally completed to 22 storeys in September 2002, it was built with heavier foundations and a redundant elevator bank to accommodate an additional 12 storeys (Bentall 2005). Although not required, the option to expand the building was built into the project from the very beginning, in the event that the Vancouver office environment had sufficient demand to facilitate the construction of extra office space. The cost of the option was the additional infrastructure cost (heavier foundations and extra elevator banks) that were not required to operate the building at 22 storeys. In 2005, the owners exercised this real option “in” Bentall 5 and commenced construction of an additional 12 storeys.

Social license to operate can be viewed either as a real option “on” a project, before development, and “in” a project after development. In other words, social license provides an option on a project as it provides sufficient certainty that a project will proceed (hence provide an economic return) given the right economic conditions. The option “in” the project stems from the increased flexibility the developer/builder/operator has with its stakeholders in the operation of the project. The flexibility is a result of the investment to build capacity and flexibility in the operations workforce and stakeholders to assist an operation during a downturn in the commodity cycle. For example, a social license should ensure that stakeholders have sufficient understanding to realize that a project may have to temporarily close during prolonged metal price downturns, without risk of losing the future option “on” the project. Stakeholders and
employees may not be happy with an operation that is curtailed, or suspended, however they would have sufficient capacity to appreciate and deal with a cyclical business, and to understand that the company has a vested interest in returning to full capacity when economic conditions improve. The investment in capacity building and workforce flexibility can be viewed as a kind of insurance policy which is another kind of option. The profit diagram of this option is shown in Figure 5.3. An investment \( L \) in workforce flexibility and capacity allows the mine to shut down in the event that the unit price is less than \( X \), the unit cost of extracting and processing.

Costs \( A \) are avoided by not developing or continuing to operate the mine. If, for example, exploration results are not favorable, then effectively unit price \( P \) becomes zero and the owner of this option has avoided the cost of development, i.e., \( A = D \). If the mine is in operation and has to shut down because \( P \) is less than \( X \), then the owner has avoided the associated losses, (which could be unlimited depending on the history of unit prices).

**Figure 5.3  Profit from Investment in Workforce Flexibility and Capacity**

![Figure 5.3](image)

Social license can therefore be viewed as an option "on" a development project, as well as an embedded option "in" a project, enhancing flexibility. The option "on" a project is a result of additional expense to ensure the community's desire to see the project advance when economic conditions support its viability. The option "in" the project arises from having fully informed and
educated stakeholders able and willing to understand the decision making required to complete and operate the project through the full mine cycle. However, the situation is actually more complex than these two simple models because the two options interact over time. The issue of whether an owner, having spent L, retains the Social License and for how long is an interesting open question.

5.5 Summary
Evidence and interest in this research indicates that the need for a social license has become paramount in today’s industry. Social license can be viewed in a sense as a type of business insurance, whereby many costs are mitigated by project success through proactive consultation programs designed around stakeholder participation. The company in return obtains business continuity through the acquisition of ‘reputational capital,’ as well as long-term shareholder value. Project uncertainty and risk can be decreased by the implementation of social license principles during the exploration phase.
6 CONCLUSIONS & FUTURE WORK

The conclusion briefly reviews some of the main findings emerging from the research and their significance to the evolution of the mining industry worldwide. This chapter also briefly highlights recommended future work needed in developing the further integration of social license into mine planning and development.

6.1 Conclusions

The importance of how companies behave and operate responsibly in accord with the underlying currents in value systems in the world in which they want to operate can not be underestimated. People everywhere are increasingly demanding the right to have a greater and more direct participation in decisions affecting their neighborhoods and environments; more so than ever before. Globalization, education and knowledge have facilitated this notion, hence aiding in the creation of a social license to operate in the early 21st Century. Communities, NGOs and stakeholders are exerting more influence over the approval, design, construction and maintenance of each project, as well as the disbursement of financial and economic benefits from activities within their locality.

In order to obtain competitive advantage, companies are working towards acquiring a social license. Evidence indicates that it is vital in obtaining business continuity; enhancing a company’s attractiveness to shareholders and lenders, as well as being instrumental in achieving the development of projects on time and on budget. In a sense, social license may be viewed as a type of insurance, whereby many costs are mitigated by project success through proactive consultation programs designed around stakeholder consensus and participation.

Although the specific term Social License to Operate appears to have first been coined by Patrick James in 1999, there seems to be little consensus with respect to what it is, how it is earned, and who has it. Although appearing to only be approximately 8 years old, social license has only really come to the forefront (as a term, not as a concept) in the last few years. The reality is that the concept of social license to operate has evolved over thousands of years, from societal shifts in values and from man’s awareness of his impact on the environment and the need to practice sustainable behavior ecologically, environmentally and socially.
Many mining companies have discovered that voluntary initiatives surpassing regulatory compliance result in less interference in their business practices by outsiders, while displaying to the public the seriousness of their efforts with respect to enhancing health and safety, diversity, and social/environmental responsibility. Contemporary projects now are tending to be developed on the approval of regulatory permitting, as well as through earlier negotiation with stakeholders from an environmental and social perspective. This more holistic approach conforms to what can be considered to be the evolution of the multi-faceted License to Operate concept.

The social license survey completed in 2006/2007 illustrates that companies and personnel are very aware of the changing value systems, whereby project success is a result of stakeholder approval and not on ore body economic feasibility alone. There is a higher level of awareness and a significant level of implementation already in place. It does not necessarily suggest the implementation is effective, rather respondents feel they have a system in place. There is also a strong interest in social license, as well as a strong interest to collaborate on future projects.

Project success is contingent on the building of sustainable relationships. The principal key success factors appear to be:

- Understanding culture, customs, language, history etc;
- Educating local stakeholders about the project;
- Ensuring open communication amongst all stakeholders;
- Enabling corporate transparency;
- Business partnership with communities for economic development;
- Workforce training;
- Employing innovation and technology to avoid undue impacts;
- Community support and capacity building;
- Collaboration with communities to meet their infrastructure needs; and,
- Meeting sustainable development criteria.

Those projects that are receiving recognition as successful projects illustrate some form of participatory approach with adaptive and co-management strategies. These approaches lead to a negotiation process whereby all parties had equal contributions in giving and acquiring knowledge. Understanding historic legacy issues was also evident to be fundamental in project
success. A key to project and mine successes in North America has been observed to be the recognition of Aboriginal traditional rights, title and interests in the project area. Companies have clearly been successful where they have invested in gaining exploration rights from Aboriginal groups to explore and develop mineral resources in their region. Without stakeholder support the project will not advance.

From the research survey it was also identified that respondents are seeking social license parameters in order to evaluate project planning success. This is considered from the evidence in practice to be best accomplished through an extensive consultation program, whereby the company and communities are the main determinants of the nature and outcome of the social license. Respondents identified four major companies as key role models for successful acquisition and maintenance of social license: Placer Dome, BHP Billiton, Rio Tinto and Teckcominco. Further analysis was conducted to determine what attributes in practice these companies shared in order to be identified as key role models. It was observed that these companies are all world leaders in their respective areas, are large, and internationally diversified. One might conclude they have the experience and financial resources to dedicate to earning a social license as well as the commitment to seriously pursue corporate social responsibility.

Further analysis of the data collected showed that the relationship between company size and perceived ability to gain social license was tenuous. The data suggests that small companies have an almost equal opportunity to acquire social license as larger companies, hence more than just financial capacity was required. Further supporting this was the fact that there appear to be an inverse relationship between project size and ability to gain social license. In other words, smaller projects had a greater propensity to earn social license than larger ones. Indications were that gold companies were more likely to be chosen as having earned a social license than others, possibly a result of a greater awareness of gold companies in general, or the fact that the term social license was first brought into the public mainstream by one of the major gold companies. Projects built in the last ten years have a higher propensity to being identified as having social license than older ones. This could be purely a result of more modern principles being applied to newer mines, and might well be anticipated.
The industry survey also strongly suggested the need for a social license scorecard from which to benchmark and measure the success of social license efforts. A relevant area for future research would appear to be to investigate the transferability of social license after a takeover, for example, what happens when a company with a strong reputation for social license to operate gets taken over by another company? It would be interesting to gauge over time the perceptions of whether Barrick Gold would be able to maintain Placer Dome’s apparent social license at its past mine sites. Although social license is maintained at the regional or operational level, one question emerges as to whether it is rather a corporate mentality or culture, something which must be developed and cultivated. The acquisition of mines therefore may not necessarily assure the transfer of social license. With the removal of the majority of the corporate office staff, those charged with developing and implementing social license may not necessarily have migrated over to the acquirer.

Overall, this research has allowed for new information to be obtained about the Canadian industry perception of social license. The information should be regarded as a snapshot at a point in time. It is considered to be useful in the context of gauging general perceptions but it is only considered to be valid for this level of exploratory research. A more rigorous approach might be contemplated in future. It is aimed to reflect industry’s viewpoints and initial progress for the benefit of industry. It obviously does not explore the community, policymaker and other stakeholder viewpoints. Future work would involve obtaining a larger data set in order to get a better understanding of the population being measured, as well as reach a broader range of stakeholders (not primarily industry members) in order to diversify the opinions obtained. There is a strong association between environmental and social issues regarding a project. Topics such as Impact Benefit Agreements, Participation Agreements, ISO 14001, and Environmental Impact Assessments need to be incorporated into the how to acquire a social license survey section, in order to link environmental concerns with social license principles.

The way forward is essentially the early implementation of social license parameters at the exploration phase of development, as well as its continued maintenance at each of the subsequent phases of mine development (Nelsen 2006).
Social license could be envisaged to involve a variety of stakeholders to be monitored and enforced through compliance with a range of criteria (economic, environmental, regulatory and political). Considerations of process in terms of cost and complexity will require close attention. Despite its intangible characteristics, a social license rests on the tangibility of other licenses as a measure of the company’s level of approval to operate. For instance, by obtaining a social license potential delays in the regulatory process can be mitigated.

Consumer boycotts of products (economic license) reinforce the acquisition of a social license by diamond mining companies. The decline in demand and value of their product forces companies to act in order to obtain their social license. They develop operations in less consumer sensitive areas (e.g., Canadian North and Polar Diamonds) and market appropriately to meet their demands.

Companies and stakeholders are becoming aware that the cancellation of projects has negative consequences for all. For instance, the government loses royalties and taxes, community members lose employment opportunities and sustainable community development, and companies lose ‘reputational capital’, costs spent on project feasibility and potential revenue. “It is precisely in the measured deliberation between the positive and negative impacts of mines that such projects need to be decided. When conflicts prevent such measured consideration, all parties lose” (BSR 2003: 5).

Industry in general is becoming well aware of the need to earn the support of communities around potential exploration activities and the concept of social license as a part of Corporate Social Responsibility. The use of situational analysis (PEST and SWOT) has been found to be a logical means to provide exploration and mining companies with the foundation from which to build a strategy for the acquisition of a social license. The preliminary use of these tools within an exploration template, developed in this research with collaboration from Placer Dome Inc, has been seen to provide a basis to establish where to begin, but more importantly to identify and define how to move forward, ensuring fully engaged and committed participation by all stakeholders.
The need for a social license has become paramount in today's industry. The company obtains business continuity through the acquisition of 'Reputational Capital,' as well as long-term shareholder value. Project uncertainty and risk can be decreased by the implementation of social license principles during the exploration phase.

Social license can be viewed as an option “on” a development project, as well as an imbedded option “in” a development project, enhancing flexibility and hence ‘optionality’. The option “on” a project is a result of the corporations earning the right (from the community) to advance the project when economic conditions support its viability. The option “in” the project arises from having fully informed and educated stakeholders able and willing to understand the decision making required to complete and operate the project through its full life of the mine cycle. The option “in” the project is the flexibility of the workforce, which ensures the corporation does not lose the project during cyclical lows (workforce restructuring) or assists in ensuring project viability.

6.2 Future Work
This research has identified four important needs for future work. One is to develop and field test methods for quantitative or qualitative evaluation of a social license. A second is to test farther the situational analysis methods described in Chapter 4 using to actual field case studies. A third need is to develop and test a methodology to integrate associated social issues into mine planning and development. This should involve full stakeholder participation in actual mine life cycle situations, shedding full insight into all perspectives of the methodology. The fourth need is more focused and relates to considering the mechanisms and means to transfer a social license following a corporate merger or acquisition.

The future study of social license needs to account for associated benefits and potential costs within mining communities. Social license is likely to be related in the future to the strategic planning criteria for resource development that communities are likely to increasingly undertake. Also, quantifying the benefits and costs to communities of associated mining projects will be important. Evaluation of the benefits of flexibility and responsiveness in mine planning, in order to accommodate and maintain community social license, will also be increasingly important in the future. The acquisition of options and flexibility can decrease project risk and possibly the
real options model can be used to quantify the amount of risk reduction.

Further field studies will allow for the testing of situational analysis methods such as described in Chapter 4 and in the exploration template, in order to determine their application in the construction of a project scorecard. Each project has its own planning parameters, thereby further field experience will allow for the determination of consensus in terms of earning a social license and project specifics.
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APPENDIX – A RESEARCH QUESTIONNAIRE

What is a Social License, and how do we acquire one?

Our research project attempts to develop a clearer understanding of what is a Social License. It also considers the process for obtaining and maintaining a Social License. All respondent details will be treated as strictly confidential.

<table>
<thead>
<tr>
<th>What is a Social License?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are you familiar with the term Social License? [Yes] [No]</td>
</tr>
<tr>
<td>2. Pierre Lassonde at the 2003 Cordilleran Roundup described Social Licence as “Social Licence is the acceptance and belief by society, and specifically our local communities, in the value creation of our activities, such as we are allowed to access and extract mineral resources”. Do you agree with the above statement? [Strongly Agree] [Agree] [Neutral] [Disagree] [Strongly Disagree]</td>
</tr>
<tr>
<td>3. Social License has been identified as being intangible (not a piece of paper) or non-permanent (implying standards and renewal), but rather a measure of a communities’ ongoing acceptance of a company’s activities. Do you agree with the above statement? [Strongly Agree] [Agree] [Neutral] [Disagree] [Strongly Disagree]</td>
</tr>
<tr>
<td>4. Are regional and/or local stakeholders important to acquiring a Social License? Do you agree with the above statement? [Regional] [Local] [Both] [Disagree]</td>
</tr>
<tr>
<td>5. Are you currently using this terminology or its concepts in your organization? [Yes] [No]</td>
</tr>
<tr>
<td>6. Are you or your organization using an alternative or modified approach? [Yes] [No]</td>
</tr>
<tr>
<td>7. Would you be willing to explain further this alternative approach as a follow up? [Yes] [No]</td>
</tr>
<tr>
<td>8. Please identify any jurisdictions and/or companies in the world that you consider to lead in the development and application of the Social License or alternative concept?</td>
</tr>
</tbody>
</table>

9. Name & Contact Information: (Optional) ____________________________

10. Which organization do you represent? (Optional) ____________________________

11. What type of mineral development organization are you affiliated with? [Exploration] [Producer] [Finance] [Government] [Prospector] [Supplier] [NGO] [Other]

12. What size is the organization you are affiliated with? [<100 employees] [1-500 employees] [>500 employees]

13. What is your position and role in this organization? (Optional) ____________________________
How do we acquire a Social License?

14. Which of the following features do you think are important to any process for acquiring a Social License? Please enter a value (10=very important; 1= not important)

- Going beyond legal & regulatory compliance
- Maintaining a sound track record as a positive corporate reputation
- Ensuring open communication amongst all stakeholders
- Enabling corporate transparency
- Promoting a positive *brand value* as a corporate image
- Responsible local stakeholder compensation
- Educating local stakeholders about the project
- Employing Innovation and Technology to avoid undue impacts
- Business partnership with communities for economic development
- Collaboration with communities to help meet their infrastructure needs
- Meeting sustainable development criteria
- Workforce training
- Community support and capacity building
- Understanding culture, customs, language, history etc
- Partnering with NGO’s for assistance where necessary
- Reference to existing reference material (MMSD initiatives)
- Situational Analysis (PEST & SWOT Analysis)
- Other

The Way Forward

15. How could a company determine if it has obtained a Social License?

Please choose from the following responses:
- Results of a community survey
- Outcome of open houses
- Results of overall community consultation program
- Letters of support from community leaders and organizations
- Receive a Government permit
- Media recognition
- Social License Scorecard
- Certification by an accredited third party
- Other

16. Who needs to determine if a Social License has been obtained?

Please choose from the following responses:
- Company
- Local Government
- Regional Government
- National Government
- International NGO’s
- Community
- Company Shareholders
- Indigenous peoples
- Other

17. Based on your knowledge of Social License, please identify which mining company(s) and/or project(s) you would choose as a good role model for Social License?

18. Do you think a company and/or community could benefit from a Social License Scorecard (a dynamic framework that details the appropriate Social License parameters) through which all stakeholders involved could observe a project’s social performance.

- Yes
- No

19. Where do you consider that future work is required to develop the Social License concept & process?

20. Would you and/or your organization be interested to collaborate with us farther in this project?

- Yes
- No