

SUSTAINABLE DEVELOPMENT IN THE MINING INDUSTRY THROUGH COMMUNITIES - THE TECK COMINCO EXPERIENCE

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ABSTRACT

Teck Cominco Limited and its subsidiaries and associated companies are a diversified mining, smelting and refining group headquartered in Vancouver, British Columbia. Teck Cominco holds interests in producing mines in Canada, the United States and Peru, mining zinc, copper, lead, gold and metallurgical coal from both open-pit and underground operations.

In February 2003 Teck Cominco's Board adopted its Charter of Corporate Responsibility and the Code of Business, Environmental and Health and Safety Practices. The Charter states " We support sustainable development and we willingly accept our obligations to constantly improve our methods of harvesting the world's resources to the benefit of our shareholders, employees, customers and local communities and all others who use or enjoy nature's bounty". Based on these overarching commitments, early in 2003 the company also instituted a comprehensive EHS Management System through a set of management standards.

Examples of three case studies from our Kimberly Operations (British Columbia), Red Dog Mine (Alaska) and the Pend Oreille Mine (Washington) will illustrate how these commitments are contributing to the development of sustainable communities in North America.

INTRODUCTION

Teck Cominco Limited and its subsidiaries are a diversified mining, smelting and refining group headquartered in Vancouver, British Columbia. Teck Cominco holds interests in producing mines in Canada, the United States and Peru, mining zinc, copper, lead, gold and metallurgical coal from both open-pit and underground operations. Teck Cominco Metals Ltd., a wholly-owned subsidiary, produces zinc, lead and a number of by-product metals and chemicals through its two refining facilities in Canada and Peru. Revenues in 2003 were Cdn\$2.4 billion and net earnings were Cdn\$149 million. The company has 4,624 employees with an additional 2,600 with the new Elk Valley Coal Corporation.

In February 2003, Teck Cominco adopted its revised Charter of Corporate Responsibility and Code of Business, Environmental and Health and Safety Practices and also instituted a comprehensive EHS Management System based on these commitments. The Charter states that, "We support sustainable development and we willingly accept our obligations to constantly improve our methods of harvesting the world's resources to the benefit of our shareholders, employees, customers and local communities and all

others who use or enjoy nature's bounty" (Teck Cominco Ltd. Charter of Corporate Responsibility, Feb 2003).

The Business and EHS Practices Code then commits us to eleven clear requirements, including:

- Foster open and honest dialogue with all our stakeholders, respect the rights, interests and aspirations of local indigenous people and seek out and listen to those in the community who are affected by our operations;
- Support local communities and their development by seeking locally-sourced goods and services and employing local people and
- Include closure and reclamation plans as a critical component of all development projects. Undertake progressive reclamation at operating mines and reclaim dormant sites to ensure long-term protection of the environment.

(Code of Business, Environment and Health and Safety Practices, Teck Cominco Limited, February 2003)

To illustrate how Teck Cominco can demonstrate their commitments and contribute to the development of sustainable communities, examples of our Red Dog, Sullivan and Pend Oreille operations will be used.

"Communities" in the context of this presentation are defined broadly as those communities in the local region that may be influenced socially, economically or environmentally by the mining project.

MEASURES OF SUSTAINABILITY

Within the Mining, Minerals and Sustainable Development Project (MMSD) final report, (ref. Chapter 9 Local Communities and Mines) a discussion of the many issues that can be created by mining operations is covered. The major ones that are highlighted include:

- Unequal distribution of benefits and risks – particularly with respect to financial/royalty payments and environmental risks;
- Pressure on governments' capacities to provide services, mediation and governance framework;
- Different timeframes and capacities for decision-making in the Government;
- Resource disparities between company and community for effective consultation;
- Sustaining benefits after mine closure (including infrastructure);
- Disruption of social fabric and lack of understanding/respect for cultural values;
- Loss of homes/land and/or access to livelihoods;
- Corruption and bribery, lack of transparency, and
- Increases in gender disparities - the report notes that women "bear a disproportionate share of the social costs and receive an inadequate share of the benefits."

(MMSD 2002)

Having an understanding of these issues can, at a minimum, result in creative ways to handle the potential circumstances in places where Teck Cominco does business, especially Central or South America.

SULLIVAN MINE – BRITISH COLUMBIA

In Teck Cominco's experience at Sullivan, the mine staff and government worked with the local community of Kimberley to come up with strategies to contribute to the sustainability of this group of people. The closure of the Sullivan Mine in Kimberley, British Columbia in 2002 offers insights into how the development, operation and closure of a mine can contribute social and economic benefits that extend throughout several generations and can provide a basis for community sustainability. Over a period of over 90 years, the relationship between Teck Cominco and the community of Kimberley evolved from one of "benevolent paternalism" in a Company-town with a strong dependency mindset to one of a cooperative collaborator within a Community that has taken control of its future with the goal to become a four-season resort area. In 1990, Cominco announced an 'indefinite closure' of the mine due to poor world mineral prices. As mining operations were streamlined, the town became very focused on the reality of 'life after the mine' and the responsibilities of increasing independence.

The company was an active player in the transitioning process for the Community, engaging the Community in the planning process to phase out operations while providing a variety of financial, technical, and infrastructure support for community initiatives. They also realized they didn't have a good understanding of the economic and social impacts the mine had had on the community. Indicators had not been identified to monitor the social and economic contributions of the mine to the region and so their effects over time had not been measured.

Consultation with the community revealed that there were a number of issues and opportunities to be addressed in the decade leading up to full mine closure. It was essential to diversify the economy, which in turn would broaden the tax base and provide alternative employment for the mine workers. Mine site management had to move from a paternalistic attitude and the community had to accept more responsibility for its future and be an active participant in the planning.

Government had a key role to play in facilitating the plans and aspirations of the community and company. In this case, it was critical for the federal government to invest capital in the community's plans to diversify its economy in order for it to be successful.

The company had the chance to attempt to assess what its social, economic and environmental impacts on the community had been and to develop and test a number of indicators that might provide valuable information in the planning process and be used in other situations.

There are three outcomes from our experience at Sullivan that should be highlighted:

The **Sullivan Mine Public Liaison Committee (SMPLC)** was formed – with participation from a variety of stakeholders, including a local environmental group and the public - to keep the Community involved in the on-going planning process for the decommissioning and closure of the mine. Chaired by a

government official, the SMPLC provides a forum where people receive information about our plans, make comments and reach decisions by consensus on the best way forward.

The **Kimberley Community Sustainability Indicators** have been developed as a basic framework of indicators and components that will help us begin to track our contributions to the community with qualitative and quantitative measures. The initial framework is simple, looking at economic, social, and environmental performance across three or four indicators and their components. For example, some of the key economic indicators we are exploring are our long-term impact on the local labor force, the extent to which we have supported sustainability through diversification of the local economy, and the contributions of the investments we have made in terms of local infrastructure and restoration activities. With respect to the environment, we want to better understand our impact on local ecosystem health and natural resources, as well as our contributions to the ecological amenity of the region and the extent to which we are taking leadership in land conservation. A look at our social performance focuses on measuring, as far as it is possible, our impact on local education, on social health and safety, and on civic leadership and community engagement.

Lastly, the **Kimberley West Development** is a new housing subdivision that will expand the Community's shrinking tax base by generating additional residential taxes as well as creating some new jobs and opportunities for contractors formerly servicing the mines. The construction of 2,000 residential units in Forest Crowne Estates – a development of homes, condominiums, apartments and townhouses – as well as parks, recreational areas, and a nature preserve is designed to contribute to the long-term sustainability of the Community. This is further enhanced by a new 27-hole golf course being constructed in the Kimberley area. All of these elements have the potential to contribute to the transition of Kimberley from a mining town to a four-season resort destination and thriving community.

RED DOG ZINC MINE IN ALASKA

The circumstances at our Red Dog Mine in Alaska with respect to the local communities are considerably different than those of Sullivan and the Town of Kimberley. The Northwest Arctic Native Association's (NANA) region encompasses about 98,000 square kilometres in northwest Alaska. The area is bisected by the Arctic Circle and is home to approximately 7,500 people, the majority of whom are Inupiat Eskimos. The Inupiat Eskimos and their ancestors have inhabited the NANA region for more than 10,000 years. The Inupiat rely heavily on subsistence hunting and fishing – subsistence hunting and fishing are not only economic necessities – they are also of cultural and social significance. Since dependence on the land is a traditional way of life for the Inupiat people, the continuance of that relationship is a vital element in their identity and values, and provides a significant incentive for them to protect their natural resources.

The Alaska Native Claims Settlement Act of 1971 settled the aboriginal land claims of Alaska Natives against the government of the United States. The Act granted Alaska Natives the right to receive title to 44 million acres of land and a cash settlement of \$962.5 million. Regional and village corporations were formed throughout Alaska to receive title to the lands and manage the cash settlement. The NANA was created to represent the Inupiat people of Northwest Alaska. Ten of the 11 villages in the area voted to

merge with the regional corporation, the NANA Regional Corporation, allowing for a strong, united voice on issues in their region. In 1980, a 120-square mile block of land that included the Red Dog deposit was selected by NANA as part of the land claim settlement.

In 1982, after much consultation and negotiation, Teck Cominco and NANA agreed to a lease with wide ranging terms. This landmark agreement contained significant provisions and commitments to run during the development and life of the mine, and its objective was clear – to develop one of the richest zinc deposits in the world, provide employment and protect the subsistence lifestyle of the people in the region. Under the agreement, Teck Cominco financed, constructed and now operates the mine and mill in addition to marketing the concentrates produced. The company also assumed responsibility for employing and training NANA shareholders to staff the operation. Upon signing, NANA received \$1.5 million. Every year after that until the mine went into production NANA received an additional \$1.0 million plus a general cost escalator. Once production began NANA received 4.5% of the net smelter return. After capital investment is recouped NANA begins sharing in the net proceeds beginning at 25 percent and increasing by 5% every 5 years until NANA and Teck Cominco share equally in the profits.

The agreement provides for education, training and employment for NANA shareholders. Education initiatives include: full scholarship programs to pursue university level studies which could lead to employment in the mining operation; trades apprenticeship programs; job shadow programs which allow high school students to come onto the mine site and follow individuals through their daily job routines to understand just what is involved in various occupations at the mine; job-to-work programs introduce students to what it means to be in the work-a-day world; and a program of school visitations undertaken by the mine staff.

The Red Dog operating agreement calls for the operation of a “subsistence committee” comprised of eight NANA shareholders. This entity has the power to shut down the transportation road between the mine and the port during caribou migration. It also establishes the date for the start of the shipping season based on the whale migration patterns in the Chukchi Sea. These are just two examples of how the subsistence lifestyle is accommodated by the mine.

In 2002, NANA shareholders on roll at the mine number about 300 or approximately 60 percent of the total workforce with annual wages exceeding \$15 million. NANA is a large corporation that also owns or works with 28 companies in several business sectors including government contracting, engineering, management services, oilfield services, mining services, hotel management and tourism and that number is growing every day. NANA is committed to becoming a billion-dollar corporation in its own right. (NANA Regional Corporation, 2004)

In many ways, Red Dog is considered a model of cooperation between government, Alaskan Natives and industry in developing natural resources responsibly, building a strong economic base and providing high paying jobs for local people. Just in 2004, the NANA shareholders and staff at the Red Dog mine cooperatively implemented an ISO conformant Environmental Management System and were the first mine in Alaska to be certified under ISO.

Some of the key success factors in this situation include the fact that the NANA people owned the land and had full title rights to the area, the formal agreement provides for the sharing of the financial benefits and details of the education and training commitments, and the recognition of the importance of maintaining the social and cultural values of the subsistence lifestyle in the communities. Also, mutual respect and a consensus building approach have been core ingredients in the process.

PEND OREILLE ZINC MINE

The situation at Pend Oreille provides another example of how a mining company can build a relationship of trust with a community and how they can work together to achieve common goals. The Pend Oreille mine was acquired in 1996 as a concentrate source for our Trail smelter and refinery which is located 100 kilometres away. It is a 100% Teck Cominco-owned property in Washington State, USA. Start up occurred in 2004 and the mine will have a relatively short mine life of 10 to 12 years.

The mine had operated previously but was closed due to economic reasons in 1977. A new mining law, passed in 1994, imposed strict environmental measures on any new metal mine development and we were required to complete an Environmental Impact Statement for the mine reopening.

While there was some strong local support for the reopening, a portion of the community had serious doubts about the project and were concerned that it's relatively short mine life would contribute to another boom/bust cycle in the area. Mining communities can suffer at both ends of the mine project's life – community life can be altered by the rapid influx of people and capital at the front end and can be disrupted even more when a mine closes and people move away in search of work elsewhere. In order to address these concerns, we approached the project with the objective of making the local community a partner with the implicit understanding that it would have sway over certain aspects of the mine's interactions. The mayor was asked to form a committee of local stakeholders who would work with the mine to plan for the mine closure and its impact on the local quality of life. The committee expanded its mandate to include issues at the development and operational stages as well. Issues include health care, environment, economic development, training, education, infrastructure development and reuse of the mine property following closure. We have dedicated a senior manager committed to listening to the community concerns and aspirations to the project.

We believe that the people in the community now feel as though they have a stake in the project rather than just being helpless bystanders. Some of the success factors in this situation include that:

- the dialogue process started in the earliest planning stages of the mine re-opening and includes planning for mine closure;
- the community committee, the Selkirk Community Teck Cominco Planners, has been designed to be inclusive of all aspects of the local community so that people not directly profiting from the mine development have as much opportunity to contribute as those who will profit directly;
- the Economic Development Plan has benefited from the input of a professional planner with the support of the local government;

- a regular program of communications using the local newspaper has been established to keep the community informed of developments, delays and issues including contracts awarded, local hiring opportunities and environmental performance, and
- a voluntary research program using input from third party experts has been initiated to address community concerns with respect to any environmental issue.

While these three Teck Cominco experiences provide a number of examples of activities and initiatives that allow mining to contribute to community sustainability - it is important to look to the lessons and experiences in other jurisdictions to learn about alternative approaches that are effective in these very different situations. There is one thing that must be kept in mind at all times – every situation is unique and requires a customized approach in order to be responsive to the needs and issues of the local communities.

ANTAMINA EXPERIENCE

Antamina is a zinc/copper mine located at high elevation in the Andes Mountains in Peru and it clearly distinguishes between the objectives of a community relations strategy and the objective of promoting a sustainable community. The community relations team at this site:

1. Promotes consultation processes and the involvement of stakeholders;
2. Works to strengthen the institutional skills and leadership capabilities in communities;
3. Handles the purchase of land, resettlement processes, conflict resolution issues, work permits, in a sensitive and responsible manner;
4. Promotes the establishment of alliances with other stakeholders;
5. Promotes and implements non-sustainable or short-term social investment projects, and
6. Implements local purchasing (goods and services) and employment training policies and practices.

The community relations team works to mitigate impacts for the purpose of building harmonious relations based on the proper handling of expectations, the prevention and resolution of conflicts, and the granting of compensation for the effects generated by the operation.

The community relations management tool is the Community Relations Plan. This Plan is the result of a strategic planning process that defined the vision, mission and objectives for community relations. It also incorporates the results of a stakeholders' mapping process, the identification of the impact area, and summarizes quantifiable objectives and targets based on management indicators that can be measured and monitored. The significant community relations programs and policies cover: local purchasing, local manpower hiring, training, land purchase and resettlement, grievance resolution, community consultation, and a policy to involve members of the community in the Project (e.g. environmental monitoring committees).

Antamina believes that the most efficient way to promote a true sustainable development vision in the long term is by entrusting an independent organization with the task of promoting and implementing

sustainable development programs on an independent, professional and specialized basis, without its work being led or disturbed by the changing relationship between the company and the surrounding communities.

Thus, Antamina has established a corporate foundation called the “Ancash Association” to promote and implement sustainable development strategies. This organization enjoys autonomy with respect to the mining company. The foundation will involve the community in the design, development and promotion of sustainable community development programs in the areas of health, education, and long term economic activities. The Ancash Association primarily promotes local initiatives generated through consensus, working groups and other collectively established consultation mechanisms that identify sustainable projects, set priorities, foster cooperation between public, private and grassroots organizations, and co-finance initiatives with support from international technical cooperation organizations. In the future, it is expected that this Association will organize and direct the community development programs currently operated by the Company (Compañía Minera Antamina, 2004).

While it may be a little simplistic, it is important for a mining operation to think in terms of the changing value equation: “In order to realize value from opportunities, companies must collaborate with communities to fully understand their social and cultural values and aspirations and agree on how best to add value to the developmental, social and cultural priorities identified by the community.”

CONCLUSION

In conclusion, there are many conditions that must be met for mining projects to contribute to sustainable communities in a global setting. In Teck Cominco’s experience, it can happen when:

- Benefits are equitably shared;
- Risks are identified and mitigated;
- Dialogue, communication and consultation activities are appropriate, effective, frequent, inclusive and participatory;
- Grievances, concerns and fears are addressed;
- Knowledgeable, respected, committed participants are involved;
- Third party expertise and studies are utilized;
- Timeframes for decisions are appropriate;
- Adequate resources are provided to support processes and build capacity;
- Commitments are honored;
- Community values, cultural traditions and social structures are understood and respected;
- Community development, infrastructure projects and training programs are identified by the community;
- Social impacts, including gender issues, are addressed;
- Companies take the long term view, plan for the future well in advance and are prepared to compromise and work to consensus;
- The processes and outcomes are transparent;
- Governments are regulators/partners/facilitators in the processes and finally

- When relationships are built on trust and respect in the spirit of collaboration and cooperation.

There is no formula for success as every situation is unique, but experiences can provide guidance on what might be best practices. And while mining companies have not systematically tracked all the costs associated with these activities over time, we know that without attention to these essential elements, successful mine development is not assured. And further, without this success, there is no opportunity for mining to contribute to the development of sustainable communities!

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