TRADITIONAL KNOWLEDGE AND ENVIRONMENTAL ASSESSMENT: A CASE STUDY OF THE VICTOR DIAMOND PROJECT

A Thesis Submitted to the Committee on Graduate Studies
In Partial Fulfillment of the Requirements for the Degree of Master of Arts
In the Faculty of Arts and Science

TRENT UNIVERSITY

Peterborough, Ontario, Canada

Canadian Studies and Native Studies M.A. Program

January 2008

Your file Votre référence
ISBN: 978-0-494-31703-7
Our file Notre référence
ISBN: 978-0-494-31703-7

ABSTRACT

Traditional Knowledge and Environmental Assessment: A Case Study of the Victor Diamond Project

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With the recent diamond rush in northern Canada, major mining initiatives have come to areas that have seen little in the way of industrial development before. One such initiative is the De Beers Victor Diamond Project, located 90 kilometres from the coast of James Bay near the First Nation Community of Attawapiskat in Ontario. By examining how the environmental assessment process unfolded in this particular project, the nature of Traditional Knowledge, its incorporation in environmental assessments, and the involvement of First Nations communities were investigated. The experience of Victor demonstrated how development approval processes work to contain opposition, rather than empower Indigenous communities and their knowledge. Traditional Knowledge was limited to general descriptions, and First Nations consultations that are required by law were limited by assessment procedures as the federal government refused to discuss Aboriginal and treaty rights issues. While a major change to the project was the result of consultations, and Attawapiskat First Nation generally felt they benefited by participating, communities and Traditional Knowledge remain disconnected from any decision-making authority.

Acknowledgements

I am grateful for the help and support of a number of people during the course of this project. First I would like to thank my thesis supervisor, Stephen Bocking, and my committee members, Lynne Davis and John Wadland. Each was invaluable in different ways, and they have my utmost respect as scholars and as people.

A great deal of appreciation goes to Attawapiskat First Nation for supporting my research in their community, in particular Chief Mike Carpenter, Deputy Chief Miriam Wesley, and Lands and Resources Director Suzanne Barns. I would especially like to thank those in the community who granted me time to interview them, and Gerald Mattinas whose help and guidance made my research in the community possible. I would also like to thank Penny Anderson at Natural Resources Canada who helped me view public registry documents and provided me with workspace, and David Okimaw at De Beers in Attawapiskat who did the same.

Finally, I would like to thank my wife Susan, my daughter Sarah, and my parents for their past, present, and future patience and support.

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1. Introduction

Canada is built on the use of Aboriginal homelands for staging its nationhood. The means in which Aboriginal territories have been consigned to priorities of the Canadian state have varied historically, and this process of colonization continues today. The extraction of natural resources in forms such as forestry, commercial fisheries, hydroelectric power, oil and mining has severely damaged Indigenous environments, economies and societies. Development models predicated on interventions resulting in severe environmental damage with little consideration for Indigenous peoples have faced numerous challenges since the latter half of the 20th century. Pressure has come from both the Aboriginal and non-Aboriginal public for governments and the proponents of industrial development to consider how their actions impact social and ecological landscapes in which they operate. This has led to increased regulation of industrial activities and more involvement of communities affected by development decisions. While all communities are demanding a voice in development decisions, Aboriginal peoples have been disproportionately affected and have more at stake. Throughout Canada's history it is their lands that have been appropriated in the name of nation building.

Environmental assessment is the primary means by which both federal and provincial governments in Canada attempt to incorporate environmental considerations in development projects. It is also a key avenue for the public to be informed of proposed developments and to have input into their design. As such, the environmental assessment

process has become a forum within which communities, industry, governments and non-governmental organizations (NGOs) come together to improve development projects by attempting to reduce impacts on the environment. However, the ways in which project impacts are understood, and intended outcomes of the environmental assessment process, can vary greatly among the participants. This is particularly so when development projects occur in Aboriginal territories where little industrial development has occurred.

First Nations people have often been excluded from development decisions that affect their territories and livelihood; however recent court decisions, such as *Delgamuukw* (1977), *Haida and Taku River* (2004), and *Mikisew* (2005), have made it clear that governments and development proponents must consult with First Nations on issues that affect them. Environmental assessment is a current means in which this obligation to First Nations is achieved, and their participation is viewed as integral to the process. While participation in environmental assessment holds the promise of providing First Nations a role in development decisions, it may also be another way of securing Aboriginal homelands for industrial development. The approval of development projects is often perceived as a foregone conclusion, and community participation may give little more than the appearance of meaningful consultation. Therefore communities themselves still lack control over major decisions.

Of major significance to Aboriginal peoples' ability to meaningfully participate in the environmental assessments is the inclusion of Indigenous Knowledge, commonly referred to as Traditional Knowledge[1]. Traditional Knowledge has been mandated in

[1] The terms Indigenous knowledge, traditional knowledge, and traditional ecological knowledge (TEK) all refer to the same form of knowledge, although some differentiate TEK as a more specialized form (see Stevenson, 1996). Although I prefer the term Indigenous Knowledge as it draws attention to a long

several environmental assessments to be considered alongside Scientific Knowledge in the examination of project proposals. By including Traditional Knowledge in the process, there is explicit recognition that the knowledge of Indigenous peoples is relevant in contemporary contexts. The inclusion of Indigenous peoples' long and intimate knowledge of their land and way of life can provide a greater understanding of what the potential impacts of a project are. It can also be a step in decolonization of the relationship between Indigenous and non-Indigenous peoples in Canada if Aboriginal peoples are connected to development decisions affecting their lands.

The following will begin with a discussion of the relationship of Aboriginal and non-Aboriginal peoples in Canada, particularly as it relates to Aboriginal resistance to assimilation and northern development. The Berger Commission Inquiry into the proposed Mackenzie Valley Pipeline, and the James Bay Hydroelectric Project in northern Quebec will be discussed in detail, as they are pivotal examples of how Aboriginal peoples have changed the context for development in Canada. These widely publicized landmark events have their roots in the 1970s; however, the development proposals involved continue to be controversial. Both the Mackenzie Valley Pipeline proposal and the James Bay Hydroelectric Project exemplify the changed environment around development initiatives, and how the ways of life of Indigenous peoples are now central to the debates. An examination of recent Supreme Court decisions that establishes Aboriginal peoples' legal right to be consulted in development decisions will conclude this discussion. Then I will examine the recent diamond boom in Canada, as

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relationship with place without the implication that it is not relevant to contemporary circumstances, something the term 'traditional' is criticized for, I largely use the term Traditional Knowledge as it was the term employed by Attawapiskat residents and in environmental assessment documents.

well as a brief history of De Beers and its domination of the diamond market. The history of De Beers is deeply enmeshed with the colonial history of South Africa that has implications for its presence in the Canadian north. This will be followed by discussion of the Victor Project and of the Cree First Nations community of Attawapiskat in whose traditional territories the Victor mine will operate. I will then discuss the current environmental assessment process, as well as the decision to include Traditional Knowledge in the assessment of the Victor Project. I will finish with my thesis statement and a discussion of several questions that are central to this research.

Aboriginal Peoples and Northern Development

The relationship between Aboriginal peoples, the Canadian state and non-Aboriginal Canadians is central to discussions of northern development in Canada. The nexus of political jurisdictions, economic systems and actors, resources and the environment, and the values and beliefs of those who live in the North or lay claim to it are part of the complexity of this relationship. A metanarrative of the North as a treasure trove of resources lying in wait, whose exploitation is needed to remedy the poverty of those who live there, often accompanies ideas of northern development. A lack of services, infrastructure, and employment, as well as poorer levels of education and health care, seems endemic to the peoples of the underdeveloped north. In other words, the North is seen as an area of great potential, but in need of embracing the models of industrial economic development in order for it to prosper. How the north is defined

often says more about the values of those giving the description rather than anything that is inherent in the land or the cultures of its people. The fact that these areas also contain a significant Aboriginal presence is very much a factor in the North's characterization as a hinterland to the southern heartland. The continued existence of Indigenous ways of life that are particularly visible in the North defies the logic of liberal democracy and wage economies that are the hallmark of Canadian and other Western societies. Thus, northern development has often meant the displacement of Indigenous ways with Western models. This conception of development, however, came under serious attack in the late 1960s when many questioned the central assumptions of progress, development and civilization.

The Royal Commission on Aboriginal Peoples (RCAP) interpreted the challenge to Western orthodoxies by Aboriginal peoples as a new chapter in the relationship between Aboriginal and non-Aboriginal peoples. The report characterized the historical relationship as having four stages. First is the stage described as "separate worlds" in which Aboriginal societies in the Americas and European societies developed an enormous variety of languages, cultures and social traditions in ignorance of each other (RCAP, 1996: 5). Stage two involved "nation-to-nation relations" in which early encounters between Aboriginal and non-Aboriginal people increase, and is marked by "cautious co-operation" (RCAP, 1996: 8). These relations were formalized in numerous treaties, as well as the *Royal Proclamation of 1763* that "portrays Indian nations as autonomous political entities, living under protection of the Crown but retaining their own internal political authority" (RCAP, 1996: 10). In stage three, "respect gives way to domination" as colonial settlers and their institutions came to dominate the land and its Indigenous peoples (RCAP, 1996: 11). RCAP noted the irony in that the main tools of

partnership between Aboriginal peoples and colonial settlers, namely treaties and the *Royal Proclamation of 1763*, were turned into instruments of oppression. Colonial and Canadian governments interpreted protection clauses contained in the documents paternalistically, and assimilation became the primary goal of government policy. Treaties were not honoured as a way to share the land while maintaining autonomy, as Aboriginal peoples perceived their purpose. Instead, they served as justifications to colonial and Canadian governments to clear Aboriginal people off desirable lands and restrict them to inadequate reserves (RCAP, 1996). The current stage, as described by RCAP, is one of "renewal and renegotiation" (1996: 17). The "White Paper" in 1969 is pointed out as a significant turning point in Aboriginal and non-Aboriginal relations, and entrenchment in the *Constitution Act* of 1982 of "existing Aboriginal and treaty rights" (in RCAP, 1996: 18) has "set the stage for profound change in the relationship among the peoples of Canada" (RCAP, 1996: 18). However, RCAP noted that this is "a change that most governments have nevertheless found difficult to embrace" (1996: 18).

The reaction identified by RCAP to the release of the 1969 *Statement of the Government of Canada on Indian Policy*, infamously known as the "White Paper", demonstrated in no uncertain terms that Aboriginal peoples intended to remain distinct peoples in Canada. The policy called for abolition of the Indian Act, nullifying existing Treaties, and assimilating Aboriginal peoples into the Canadian population. The assimilationist policy of the federal government was nothing new - only a restated version– and was soundly rejected. The Indian Chiefs of Alberta responded with "Citizens Plus" in 1970, or what is often referred to as the "Red Paper". Citizens Plus took its title from the Hawthorn report of 1967 that made the statement:

> Indians should be regarded as 'Citizens Plus', in addition to the normal rights and duties of citizenship, Indians possess certain additional rights as charter members of the Canadian community (in Indian Chiefs of Alberta, 1970).

In Citizens Plus, the Indian Chiefs of Alberta rejected the unilateral conclusions drawn by the Canadian government, and maintained, "the recognition of Indian status is essential for justice" (1970). The reaction to the White Paper forced then Liberal Prime Minister Pierre Trudeau and his Minister of Indian Affairs, Jean Chrétien, to withdraw the policy. With the proposal of several large development projects at the time or soon after the release of the "White Paper", debates over these projects became a central point for Aboriginal peoples to exert their newfound political power.

In particular, the Berger Commission appointed by the Trudeau government to investigate the potential of constructing the Mackenzie Valley pipeline became a highly publicized debate over the merits of large-scale development projects in the north. Formed in 1974, the Commission was given the mandate to investigate the social, economic and environmental impacts of building a gas pipeline from Prudhoe Bay, Alaska, to the Mackenzie Delta in the Northwest Territories, and then through the Mackenzie Valley (Berger, 1977). While numerous companies explored the idea of a pipeline to supply mainly U.S. markets, a consortium of twenty-seven Canadian and American companies eventually emerged as Arctic Gas, and "proposed the greatest construction project ever to be undertaken by private enterprise" (Berger, 1988: 1). The selection of Justice Thomas Berger to lead the commission was significant as he had already demonstrated his concern for Aboriginal issues by representing the Nisga'a in their 1973 land claim against the Province of British Columbia. Berger made it clear he

would hear all points of view, including those of environmentalists and Aboriginal peoples, much to the consternation of the oil and gas industries (Sabin, 1995; Page, 1986). The Commission conducted extensive community consultations, holding hearings in numerous communities throughout the Northwest and Yukon Territories, and "offered an open microphone to all who wished to speak" (Sabin, 1995: 22). The Berger Commission became a critique of conventional ideas of development as Aboriginal peoples gave extensive testimony on their way of life and their relation with colonization. Many who spoke to the Commission asserted development that undermined subsistence activities was unacceptable. The Commission also provided an opportunity for Aboriginal people from southern Canada to relate their experience with development. As George Manuel, then President of the National Indian Brotherhood told the Inquiry,

> "We, the aboriginal peoples of Southern Canada, have already experienced our Mackenzie Valley pipeline. Such projects have occurred time and time again in our history. They were, and are, the beginnings of the type of developments which destroy the way of life of aboriginal peoples and rob us of our economic, cultural and political independence" (in Berger, 1977: Vol. 1, p. 170).

As such, the Berger Inquiry became an investigation into the nature of development, and a forum for Aboriginal peoples to express more than simply their position or concerns about the project. Aboriginal peoples were able to give testimony on their way of life and the substantial differences in perception Aboriginals and non-Aboriginals have about the environment.

Differing concepts of the North are well captured in the choice of title for the commissioner's report, *Northern Frontier, Northern Homeland* (1977). Aboriginal peoples' relationship with the North as a "homeland" permeates everyday life, and

through an intimate knowledge of their surroundings, they have been able to sustain themselves for thousands of years. As a "frontier", the North represented something decisively "not home". While industrialists and environmentalists envisioned different purposes for the North, the former seeing a wealth of yet to be tapped resources, the latter as a sanctuary from urbanization in need of protection, they both imagined the north as a means to benefit the lives and well being of the south. The North's purpose was always in service of southern priorities. The Berger Commission provided a platform where Aboriginal peoples could inject their voices into this conversation and argue for what they saw as important. Aboriginal peoples were aligned with environmentalist organizations in providing strong opposition to the pipeline as both were intimately concerned with environmental impacts of the project. However, where environmentalists often were interested in preserving a 'pristine wilderness', Aboriginal communities wanted control over development decision that would impact their way of life. They were not necessarily against development, but wanted land claims to be settled. In this way they could guide and see benefits from development decisions, and be able to adapt to any changes in their communities and the environment. Thus the alliance between Aboriginals and environmentalists that occurred with regard to the Mackenzie Valley Pipeline was born more out of convenience than from ideological solidarity. However, the experience of the Berger Commission demonstrated that environmental and Aboriginal organizations working together could be a formidable opponent to the proponents of industrial development.

The desire for control over development decisions was not limited to Aboriginal peoples, but was common among many northern residents. As Paul Sabin states, "instead

of a dogmatic opposition to all change and development, the most widely expressed sentiment of all northern peoples, both native and non-native, was their aspiration to shape their own destiny" (1995: 39). Berger concluded that the "pipeline and energy corridor would change the North, alter a way of life and inhibit – perhaps extinguish – the native people's choices for the future" (1977: Vol. 1, p. 143). He agreed with the Aboriginal peoples that any pipeline development would have to wait until all land claims along the route were settled. Therefore, in addition to recommending no development across the coastal plain through the Yukon because it would interrupt the calving grounds of the Porcupine caribou herd, Berger recommended:

> A Mackenzie Valley pipeline should be postponed for ten years. If it were built now, it would bring limited economic benefits, its social impact would be devastating, and it would frustrate the goals of native claims. Postponement will allow sufficient time for native claims to be settled, and for new programs and new institutions to be established (Vol. 1, p. xxvi-xxvii).

The recommended moratorium on pipeline development in the Mackenzie Valley has lasted far more than the ten years suggested by Berger. In the interim, many of the land claims have since been settled and the Mackenzie Valley Pipeline is once again on the table.

The second coming of the Mackenzie Valley Pipeline is in the form of the Mackenzie Gas Project - a consortium of four major gas companies and the Aboriginal Pipeline Group who represents Aboriginal interests in the project (MGP, 2007). This time around there is much more support from Aboriginal communities, and they are directly involved in the project itself. Rather than the storm of opposition that was raised when the Mackenzie Valley Pipeline was first proposed, many now embrace the project

as an economic boon to the region. However, there is still significant opposition from Aboriginal and environmental organizations, and land claims issues remain unsettled. The Berger Report was followed by an intense period of land claims settlements that saw the Inuvialuit Final Agreement in 1984, the Gwich'in Land Claim Agreement in 1992, and the Sahtu Dene and Métis Comprehensive Land Claim Agreement 1n 1994. These agreements created legal room for the establishment of the Aboriginal Pipeline Group, who represent signatories of comprehensive land claims in the region. The Inuvialuit have also gained a significant stake in oil field development in the Mackenzie Delta. However, the Dehcho have not settled their land claim as they refused to extinguish their title to the land and replace it with piecemeal corporate ownership, as the other settlements entailed (Cizek, 2003). This has meant a substantial area through which the proposed pipeline is to travel remains unresolved, although a framework agreement has been in place since 2001. In addition, the federal government failed to consult the Dene Tha and was ordered by the Federal Court on November 10, 2006 to do so before the current review process into the proposed pipeline can be concluded. Although the Mackenzie Gas Project has yet to receive final approval, the promise of economic benefits negotiated in land claims has resulted in much support for the project. The Dehcho's demand for greater concessions has created divisions within the community as many fear the project will proceed without the community receiving any benefits. Thus the Dehcho appear ready to capitulate to the federal government's terms and reach a final agreement, seeing little alternative (see Dehcho First Nations, June 28, 2007). With consultations now ongoing with the Dene Tha in the review process, the project appears likely proceed. The desire of proponents of oil and gas development and governments to

see the Mackenzie Valley Pipeline a reality has provided Aboriginal peoples in the region leverage to make resolving their land claims a priority. However, the terms and conditions of settlements have resulted in major compromises or remained unacceptable to Aboriginal peoples in the Northwest Territories.

While the Berger hearings were grabbing national and international attention, another major confrontation was under way in northern Quebec. In 1971, Quebec Premier Robert Bourassa officially announced the James Bay Hydroelectric Project without any prior consultation with the Cree or Inuit populations in the project's vicinity (Rynard, 2001). Unveiled on the heels of the October Crisis, Bourassa envisioned the massive hydroelectric project as something on which the economy of Quebec could be built. The James Bay Project was to "provide (the province of Quebec) the cornerstone for a great economic leap forward" (Richardson, 1975: 21). The proposal involved damming of seven major rivers and the creation of massive reservoirs that would result in large scale flooding, dramatically altering the landscape of northern Quebec. The provincial government projected James Bay would generate over 30 percent of the power Canada produced at the time of the proposal (Richardson, 1975). Bourassa stated, "Quebec is a vast hydroelectric plant-in-the-bud, and every day millions of potential kilowatt-hours flow downhill and out to sea. What a waste!" (in Niezen, 1998: 63). Further: "what once appeared to be a forbidding and barren land, only sparsely populated by the Inuit and Cree, has become Quebec's new frontier" (Bourassa in Niezen, 1998: 66). The Bourassa government clearly saw Cree and Inuit peoples as little more than an impediment to Quebec's prosperity. They gave no value to the way of life of Indigenous

peoples, and no value to an environment that was not in service of an industrial development agenda to benefit the south.

Cree and Inuit leaders did not become aware of the project until it was reported in the press, but then quickly organized to challenge the Quebec government's plans for their land (Niezen, 1998). However, there was little recourse but to challenge the James Bay Project in Quebec's own courts while project construction continued. A temporary injunction was granted after a year to halt construction while the governments of Quebec and Canada negotiated a land claim with the Cree and Inuit (Rynard, 2001). However, the James Bay Development Corporation, the provincial crown corporation responsible for the project, was successful in having the injunction lifted by the Quebec Court of Appeals after only one week (Niezen, 1988). The resulting James Bay and Northern Quebec Agreement (JBNQA) was therefore negotiated while Phase One of the project continued, severely undermining the bargaining position of the Cree and Inuit.

The signing of the JBNQA in 1975 signalled the first of the modern day treaties (Saku, 2001). The 1973 Supreme Court *Calder* decision, advanced by the Nisga'a in British Columbia, recognized the continued existence of Aboriginal rights and title in areas not covered by existing treaties as stemming from the *Royal Proclamation of 1763*. As existing treaties did not cover the lands of northern Quebec, the Canadian and Quebec governments were forced to negotiate with Indigenous populations. This ushered in a new phase of treaty making after about fifty years of inactivity. In their modern incarnation treaties took the form of Comprehensive Land Claims, which are much more complex documents than earlier treaties that often detail self-government measures and resource sharing. While it wasn't until 2000 that the Nisga'a finalized their land claim

with the federal government, the JBNQA was negotiated in only two years. However, in that it was negotiated under duress with the development of traditional territories a foregone conclusion, many similarities remained to the earlier era of treaty making in Canada. The surrendering of lands and the extinguishments of title remained the primary goal of the federal and provincial governments. As Cree Chief Billy Diamond noted at the time of the negotiations:

> Not only did the negotiators come in with [surrender and extinguishment] as a condition which was not subject to discussion...Canada made it clear that if we did not proceed with the agreement process, unilateral legislation would have been imposed on us in any case (in Niezen, 1998: 75-76).

It appears that the Trudeau government recognized that it was essential to accede to Quebec's demands in the face of the continuing separatist threat. Standing in the way of the Bourassa government's plans was not politically tenable as it would have fuelled calls for Quebec independence and, as the October Crisis made clear, could have violent consequences. These conditions meant that the concerns of Cree and Inuit peoples of northern Quebec were not a priority to both federal and provincial governments, and their communities and lands were considered as little more than fodder for 'national interests', whether it be the Canadian state or the Quebec nation.

Although the conditions under which the JBNQA was signed were not favourable, nevertheless the agreement did have some favourable aspects. It provided the Cree and Inuit with greater tools, in the form of finances and organizational ability, to mount a much greater challenge when Phase Two of the James Bay Project was announced in 1986 (Young, 1999). Known as the Great Whale Project, Phase Two entailed further dam and reservoir construction that would flood an additional 3,500 square kilometres,

including damming the Great Whale River. This time, much like during the Berger hearings, significant support was garnered from environmental organizations. A canoe trip from James Bay to New York City under direction of Mathew Coon Come, the Grand Chief of the Grand Council of Crees at the time, was immensely successful in conveying their story to the American public. The result was cancellation of contracts between New York State and the Quebec government to purchase much of the hydropower the Great Whale phase intended to generate. The Quebec government eventually cancelled the Great Whale Project in 1994. Unlike the moratorium on proposed developments that emerged from the Berger Inquiry, this was the first time such a major development project had been stopped – a major victory for Aboriginal peoples.

This has led to a very different climate for negotiations in the latest incarnation of the James Bay Hydroelectric Project. The signing of the *Paix des Braves* agreement in 2002 by then Grand Council Chief Ted Moses and Bernard Landry cleared the way for more hydro development in the eastern James Bay region. The final stage of the original James Bay Hydroelectric Project entails construction of the Eastmain power generating station. A subsequent agreement in 2004 initiated an environmental assessment of diversion much of the flow of the Rupert River into the Eastmain reservoirs and additional power generating stations. Agreed to under the leadership of Ted Moses, the election of Mathew Mukash as Grand Chief in 2005, an ardent critic of the diversion project, indicated the divisions present in Cree communities over hydroelectric development. Referendums held in three Cree communities most affected by the Rupert River diversion soundly rejected the proposal. Despite opposition, Premier Jean Charest officially announced construction of the Rupert River diversion, and the Eastmain A-1

and La Sarcelle generating stations, on January 11, 2007. Charest had originally planned the announcement to take place in the Cree community of Waskaganish; however, fear that it would be disrupted by Cree peoples opposed to the project caused Charest to change the venue to Hydro Quebec's headquarters in Montreal (CBC, January 11, 2007).

The examples of the Mackenzie Valley Pipeline and the James Bay Hydroelectric Project demonstrate is that there can be serious impediments to development projects when Aboriginal resistance is strong. Development proponents are likely to find it is of great strategic importance to establish good relations with First Nation communities. The Courts as well have established the requirement for First Nations to be consulted in development decisions that concern their traditional territories. Expanding on earlier court decisions, such as *Calder* that recognized the continuance of Aboriginal rights and title, the *Delgamuukw* decision by the Supreme Court of Canada in 1997 affirmed that Aboriginal title meant a constitutionally entrenched right to land itself (Borrows, 2006). In its decision, the Supreme Court stated "a process of negotiation and reconciliation that properly characterizes the complex and competing interests at stake" (in Borrows, 2006) is necessary to avoid litigation where questions of Aboriginal title are a factor, and that the "Crown is under a moral, if not legal, duty to enter into and conduct those negotiations in good faith" (in Borrows, 2006). The requirement to consult with Aboriginal peoples has been further defined in the *Haida* and *Taku River* decision in 2004. The Supreme Court ruled governments had a duty to consult and accommodate Aboriginal peoples affected by lands and resource development, even when rights and title have not been proven. While the ruling requires Aboriginal peoples to be consulted, it does not give them veto power over developments. The Mikisew Cree of northern

Alberta put the rulings of the Haida and Taku River cases to the test in 2005. Arguing they had not been consulted over a proposed road that would run next to the reserve through Wood Buffalo National Park, the Supreme Court ruled in their favour. Again in the *Mikisew* decision the government's duty to consult with Aboriginal peoples affected by development is reaffirmed.

The struggles and consequences of the James Bay Hydroelectric Project are well known in the Cree communities on the Ontario side of James Bay. This has only heightened both fear of the environmental consequences of large developments and its impact on Indigenous cultural traditions, and fuelled optimism that economic benefits will follow. With the coming of Canada's northern diamond rush to northern Ontario, the questions of appropriate development models that are both environmentally and socially sustainable are again being examined. As the examples of hydro development at James Bay and pipelines in the Mackenzie Valley demonstrate, the extent of negotiation and partnerships with Aboriginal peoples has changed dramatically. In both instances, the issue of development forced land claims to be settled, giving Aboriginal peoples in the regions more control and greater benefits from development projects. However, the issue of development remains divisive in First Nations communities, and not all First Nations have equally benefited. The question arises as to whether this new environment of partnership will allow Aboriginal peoples in the north to retain a meaningful form of sovereignty over their traditional territories as industrial development proceeds, and what will the effects be on subsistence activities. These partnerships must be entered into with great caution. The echo of the White Paper can be heard when industrial and Aboriginal interests are painted as one and the same.

De Beers and Diamonds in Canada's North

Diamond mining has rapidly become a major enterprise in the Canadian north. Several mines are in or nearing production and a handful of other sites are in the advanced exploration stage. This has created a number of issues for Aboriginal peoples in the north. Confronted by powerful multinational mining corporations and their plans for the land, Aboriginal communities in remote regions have had to learn quickly about the mining industry. Mining is often the leading edge of colonialism, and no company embodies this more than De Beers. The history of De Beers is embedded with the colonial history of southern Africa, and its actions as a corporate entity demonstrate a ruthless pursuit of power and profit. The coming of the diamond industry to northern Canada poses a significant challenge to Indigenous ways of life in the north. An immense power imbalance exists between wealthy mining companies and remote Aboriginal communities. The federal government plays a dual and contradictory role in that it ensures an environment favourable for the economic development of natural resources, and has fiduciary responsibilities for First Nations peoples, while provincial governments have jurisdiction over natural resources. Thus, the interests of First Nations are only partially represented against interests heavily indebted to resource development.

The unprecedented diamond rush in the Canadian north was ushered in when fledging mineral explorer Chuck Fipke and his crew tracked down the biggest diamond strike in North American history in 1990 (Krajick, 2001). Further exploration by Fipke and his newfound partner, Australian mining company Broken Hill Proprietary (BHP), confirmed the richness of the find that capped a twenty year search throughout North

America (Bielawski, 2003). In Kevin Krajick's *Barren Lands*, Fipke is portrayed as manically driven in his single-minded pursuit of the power, prestige, and incredible wealth that the first big strike would bring. Ellen Bielawski states that for a brief time, "Fipke and the diamonds, rather than the land that held them, were the only story" (2003: 27). The find would result in the massive Ekati Diamond Mine, carved out of Lac de Gras (Ekati is the Dene name for Lac de Gras), north of Great Slave Lake in the tundra of the Northwest Territories. As the scientific understanding of the conditions under which diamonds were formed grew, as did knowledge about other minerals found in conjunction with diamonds, the north of Canada soon became the scene of an intense diamond rush that continues to this day. Speculation about the possible fortunes that may be found in remote northern regions has led to a contemporary version of mining booms of the past. However the amount of land targeted for exploration in the current diamond rush is unprecedented in its scale.

Understanding of the geology that would indicate the presence of diamonds is still developing and closely guarded knowledge. It was not until the development of plate tectonic theory in the second half of the 20th century that a general idea of the conditions under which diamonds form began to take shape. Central to this was the idea of continental cores or cratons, which are the stable part of the continental crust that represent the earliest formation of the continents. In North America the Canadian Shield is such a formation, being one of the world's largest areas of exposed Precambrian bedrock as it rings Hudson's Bay and extends far inland. As diamonds form under conditions of intense heat, pressure and stability, the bottom of the ancient cratons create the conditions necessary for diamond formation (Krajick, 2001). Diamonds are carried

towards the surface by kimberlites, which are semi-molten gassy eruptions that travel through fissures and weaknesses (Krajick, 2001). Kimberlites may never reach anywhere near the earth's surface, and if they contain any diamonds at all, many occurrences, such as too high temperatures or the presence of oxygen, can destroy them (Krajick, 2001). Thus, while the presence of kimberlite deposits is necessary for diamonds, but they do not necessarily mean there will be diamonds. However, it is the even more recent identification of indicator minerals that are formed with diamonds, in particular G10 garnets, which have led to numerous discoveries. It was uncovering the trail of indicator minerals, such as the G10 garnet, that led Fipke and his geologist partner Stewart Blusson to their discovery in Lac de Gras (Bielawski, 2003; Krajick, 2001).

Although shut out of the Ekati mine development, one of the main players in diamond exploration and mine development in Canada is the South African based conglomerate De Beers. De Beers' name is synonymous with the colonization of Indigenous peoples and their territories on the African continent, and the company has ruthlessly pursued and maintained a virtual monopoly over world diamond markets. The company's historical relationship with Indigenous peoples should be of concern to First Nations communities in the Canadian north affected by diamond mining and exploration activities. De Beers takes its name from the Boer farmers who discovered diamonds on their land, beginning the South African diamond rush in the later part of the 19th century. The De Beers land was sold off as they saw their agricultural and religious way of life overrun by diamond seekers, and much of it eventually fell into the hands of Cecil Rhodes who created the De Beers Company in 1880 (Kanfer, 1993). De Beers grew quickly, gaining a virtual monopoly over the diamond industry by effectively controlling

both the production and marketing of diamonds, and "effectively maintain(ing) an illusion of diamond scarcity" (Bergenstock and Maskulka, 2001:37). In consolidating control over the coveted Kimberly diamond fields in 1889, De Beers stunned observers in writing what was then the largest cheque ever written, in the amount of £ 5,338,650 for the assets of Central Company (Kanfer, 1993). It was the aspirations of Rhodes for complete dominance over the diamond mining industry that perhaps required paying an exorbitant amount, but in doing so gained an unprecedented position in the diamond industry. In fact, Rhodes wanted more than simply control over the diamond industry. He had visions of "an Africa, from the Cape to Cairo, placed under British domination" (Kanfer, 1993:59), becoming Prime Minister of South Africa in the process and colonizing the territory of Rhodesia (named after Rhodes). His willed legacy of Rhodes Scholarships was intended to further the domination of the British Empire as he had visions of a "*Pax Britannica* (italics in original)" (Kanfer, 1993: 59). Rhodes' desire was for Canada, Australia and the United States to rejoin the British Empire and see its dominion grow to cover the globe (Kanfer, 1993).

De Beers' dominance in the economic and political landscape of the southern African continent has left a bitter legacy for Indigenous populations. The company and its former chairman are deeply imbedded in the racial subjugation and segregation that eventually developed into the Apartheid system of South Africa. Developing out of the Pass Laws introduced in 1923 which required Black Africans to carry pass books in order to regulate their movements, the Apartheid system came into full effect in the late 1940s and further segregated and restricted the Black population. Rhodes views reflected racist attitudes that were prevalent among political elites and justified European imperialism.

He regarded African natives as "subhuman, forever drinking and fornicating when they should be working", and separated from Europeans by "two thousand years" of civilization (Kanfer, 1993: 115). Racial inequality provided De Beers with great power and flexibility over their workforce throughout much of its history. The non-White African population occupied the lowest paid, dangerous, and labour intensive positions, and supplied De Beers with a ready pool of desperate labour that was easily hired or fired to meet the needs of the company (Kanfer, 1993).

While De Beers was immensely successful at gaining control over the international production of diamonds, they were equally adept at marketing them. Under the direction of Harry Oppenheimer in the late 1940's, De Beers utilized one of the most successful and enduring advertising slogans with the "A Diamond is Forever" campaign. To further the notion that diamonds were the hallmark statement of romantic love, the advertising agency of N.W. Ayer, who designed the promotion, invented a tradition of giving diamonds as engagement symbols, thus "inculcating the belief that, era after era, great romances were always consummated with a gift of diamonds" (Bergenstock andMaskulka, 2001: 40). This not only envisioned diamonds as a necessity for engagements, it also conveyed "the notion that, once received, a diamond should not be resold, thus keeping the secondhand diamond market...to a minimum" (Bergenstock and Maskulka, 2001: 40). With De Beers' dominance in the diamond market, they were not constrained by promoting a specific brand of diamonds or retail outlets, but could simply market diamonds. Harry Oppenheimer's father Ernest, who gained ownership of De Beers in 1926, created the Central Selling Organization (CSO), establishing De Beers and its subsidiaries as a de facto cartel. The CSO is the marketing arm of De Beers that

purchases diamonds from producers, including De Beers' own mines, on an exclusive contract in amounts determined by the CSO (Cabral, 2007). The CSO has the stones cut and polished, and then sold at events called "sights" on a take-it-or-leave-it basis at prices and quantities set by the CSO (Cabral, 2007; Kanfer, 1993). It is considered a great privilege to attend these "sights" and few would dare refuse or attempt to haggle over the offer as it can lead to banishment from the CSO sales, thus greatly hampering one's ability to buy diamonds at all (Cabral, 2007; Kanfer, 1993). At one time, the CSO controlled over 80 per cent of the world's diamonds however, many recent challenges to De Beers control has reduced this to approximately 65-75 per cent (Cabral, 2007). It is often in the interest of mining companies other than De Beers to sell to the CSO as it provides a ready and able buyer, and through the CSO's control of the market, they are able to regulate how many diamonds are available, and thus control prices. Therefore, when it comes to diamonds, its traditions, scarcity, and desirability are all largely creations of De Beers.

As such, De Beers' exploration and mining activities have more to do with keeping potential mines out of the hands of competitors than supplying any market scarcity. As many argue, there is no world shortage now or in recent history of rough diamonds (Bergenstock and Maskulka, 2001; Cabral, 2007; Kanfer, 1993; Epstein, 1982). The CSO has the ability to stockpile, holding back its product when prices are not favourable. Companies that try to bypass the CSO and sell on the open market run the risk of driving prices down below what the CSO would pay, which only enhances the CSO's position among competitors. However, as De Beers has seen its control over the diamond market slip somewhat in recent times, the corporation needs to make certain

they have significant control over rough diamond production. The erosion of De Beers' dominance is due in part to spectacular finds in Canada by their competitors. Thus, De Beers has exerted much effort on exploration activities in Canada to ensure they remain the dominant player.

De Beers' interest in diamond exploration activities in the James Bay Lowlands began in the 1980's. By early 2000, they had located over 20 kimberlite pipes that contained diamonds, with the Victor pipe showing particular promise (Fowler *et al*, 2003). De Beers felt great pressure to establish a mining presence in Canada with the Ekati and Diavik sites at various stages of production, and numerous exploration companies staking vast tracts of land in the north. Victor will be the second mine for De Beers in Canada, as Snap Lake is currently under construction in the Northwest Territories, and the first diamond mine in Ontario. The Victor site is located about 90 kilometres west of Attawapiskat, within the First Nation's traditional territory. It is expected the mine will employ about 600 people during the construction phase, and about 400 people will be employed during operations (De Beers, 2006). De Beers states the mine will be in operation for approximately 12 years, with a total project life of 17 years including construction and closure stages (De Beers *Factsheet*, 2006). However, De Beers is exploring the viability of at least three other kimberlite deposits in the vicinity of Victor that could extend the life of the mine several more years (De Beers *Extension*, 2006), and numerous other companies are actively exploring in the area.

De Beers intends to mine 28.5 million tonnes of kimberlite in total, which will result in an open pit about 200 metres deep and 1,000 metres wide (De Beers *CSR*, 2005). The project will require the diversion of creeks, substantial groundwater dewatering in

and around the open pit, tailings disposal, the building of numerous facilities both on and offsite for processing and storage, road construction, and the construction of new power transmission lines (De Beers *CSR*, 2005), to name only a few of the activities associated with the mine. The remoteness and lack of other major industrial activities means that De Beers will need to build a significant amount of infrastructure in the region to service the mine site. As such, the effects of the Victor Diamond Project will be felt throughout the area as it represents a substantial intrusion into the region.

The Attawapiskat Cree

The First Nations community of Attawapiskat lies five kilometres inland from James Bay, about halfway up the west coast in the Mushkegowuk or James Bay Lowlands region (See Figure 1). The Mushkegowuk Council affiliates Attawapiskat politically with several other First Nations communities who have traditionally occupied the region, and Nishnawbe Aski Nation also represents them as a signatory of Treaty 9. It is far from Ontario's highway system, which does not extend much further north than Cochrane almost 500 kilometres to the south. Railway transportation also ends 160 kilometres south in Moosonee where the Ontario Northland reaches its northern limits. Attawapiskat thus depends on air transportation, limited shipping in James Bay in the summer months, and a winter road connecting it with other James Bay communities to the south, for travel and goods. This isolation means that the cost of living in Attawapiskat can be very high. Goods at the Northern Store, the remnant of the North

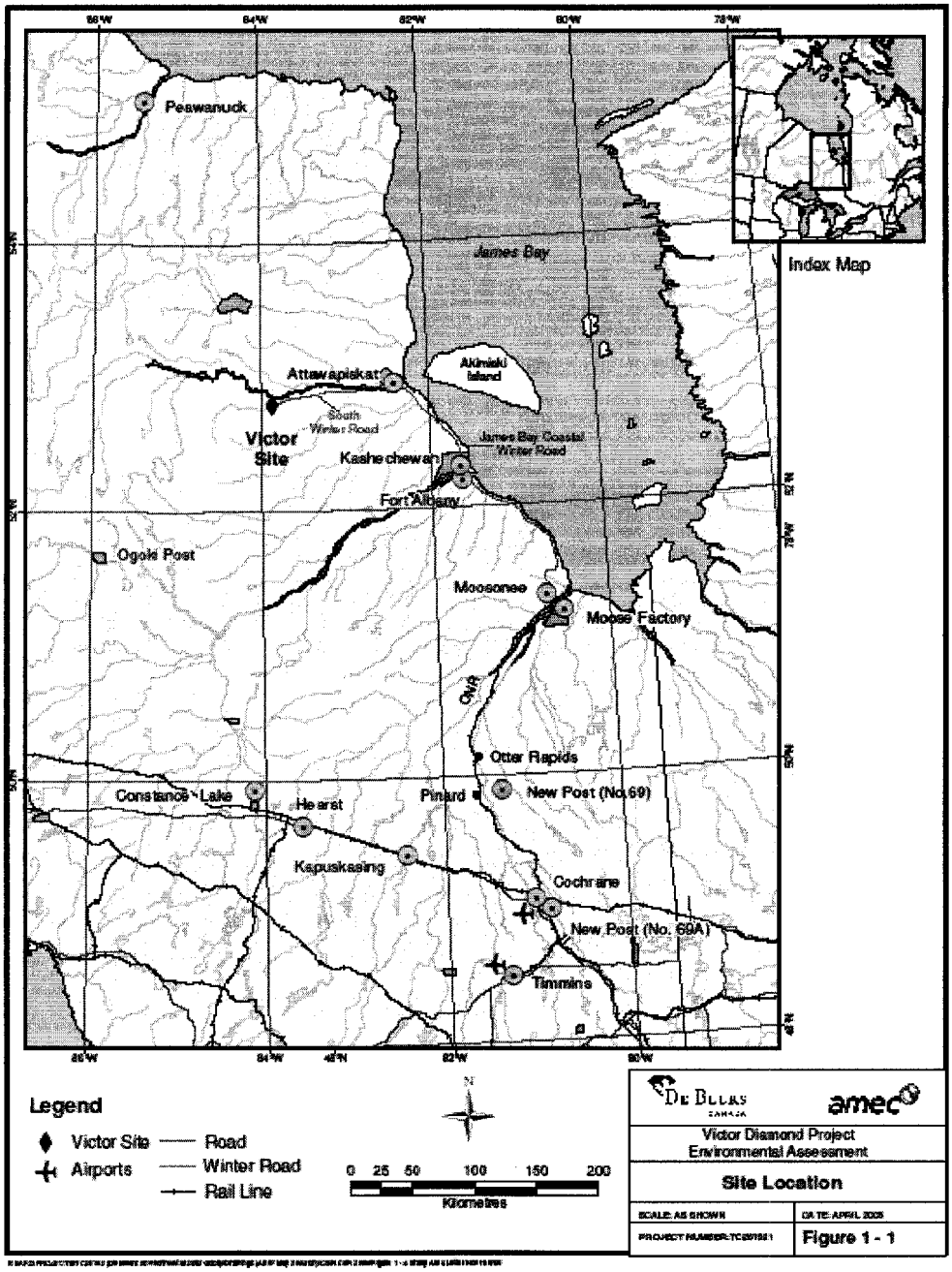

Figure 1: Map of the Victor Mine Site in Northern Ontario

Source: Canadian Environmental Assessment Agency and De Beers Canada, *Victor Diamond Project: Comprehensive Study Report* (2005).

West and Hudson's Bay Company trading posts, which supplies many First Nations and Inuit communities with groceries and general merchandise, can be marked up considerably from retail prices in southern Ontario. Air travel outside the community to access services and to purchase goods not available in Attawapiskat is an expensive undertaking for a community with little in the way of cash income. Wage labour unemployment is very high in Attawapiskat at an estimated 75%, and its population is growing rapidly, resulting in a demographic weighted towards younger age groups (Cummins, 1999).

Although isolation from southern market economies has created many hardships for the people of Attawapiskat, it has also entailed greater cultural autonomy. Traditional activities remain an important part of life, and Cree language usage is very strong in the community as 98% of the population speaks Cree (Wakenagun, 1999). While English is commonly used, it is Cree that is the language of everyday conversation and many of the Elders are unilingual (Cummins, 1999). Hunting and fishing are important activities in Attawapiskat, providing a significant food source that is shared throughout the community (Cummins, 1999). The spring goose hunt in particular is perhaps the major event of the year, engaging almost the entire community (Witt and Hookimaw-Witt, 2003; Cummins, 1999; George *et al*, 1996). As Norbert Witt and Jackie Hookimaw-Witt state:

> a large portion of the population no matter if they are counted as *traditional* or *modern* (italics in original) are still engaged in the annual goose hunts, many women are still producing crafts, and almost everybody in Attawapiskat uses wood as fuel for heating their homes. The basis for all these activities and the commodities resulting from them is the land and the traditional use of it (2003: 370).

Despite the continued importance of traditional activities, there is acknowledgement in the community that there is a substantial change from the nature of past practices. In his study on traditional land tenure amongst the Attawapiskat Cree, Bryan Cummins noted that the perception among locals was that only "10% or less of the population were involved in any land use activities" (1999: 5). However, his study revealed that traditional activities continued to be of vital importance to the community. The spring goose hunt alone involved the participation of 92% of all households in the community (Cummins, 1999: 137). A study by Peter George, Fikret Berkes and Richard Preston that attempted to calculate the replacement value of bush food in nine Mushkegowuk communities, found the economic value of the traditional economy to be the equivalent of about one third of household cash income (1996). They noted how their findings debunked "the longstanding impression that the Cree communities of the Mushkegowuk are not very active in terms of traditional subsistence pursuits" (George *et al*, 1996: S358). In addition to reporting frequent consumption of bush food by those surveyed in the study, "they confirmed that the distribution of subsistence harvests among relatives and neighbours remains a widespread practice in the Mushkegowuk region" (George *et al*, 1996: S358).

What perhaps underlies the low estimation of land use activities by local residents is qualitative changes in the nature of these activities. Land activities that emanate from the Reserve community are much different from a life on the land, as they may only be a part time occupation or even simply for recreation. Life on the land, however, requires intimate knowledge of the environment, and what the land brings forth permeates the

totality of one's experience. As Elder Moses Sutherland states in a collection of Omushkegowuk oral history compiled by the Ojibway and Cree Cultural Centre:

> All of those things are forgotten. Take for example today's students; they do not know these things. They do not even know how to make snowshoes...This is what happens when someone wants to use resources from the land. They are forgetting even their language. They do not know what to call some things. The hunting methods are forgotten. Hunting is no longer being practiced. However, some are still hunting, but using modern equipment (in Weesk and Hollander, 1999: 68).

Therefore, while hunting may continue in its contemporary form, the relationship with the land has changed. A life lived on the land meant knowing how to make a living from local resources, with little dependence on manufactured goods. For example, as one gains knowledge in how to service a snowmobile, they may lose knowledge that pertains to how one traveled without the machines. Sutherland sees evidence of this in how Cree youth might not know how to make snowshoes, and how Cree terms important for living from the land are no longer common knowledge. He further states that traditional ways are needed for survival on the land, while modern methods have more to do with convenience. As many of the contributors to the Omuskegowuk oral history compilation noted, hardship is very much a part of life on the land. Further, experiencing and remembering those hardships is integral to both subsistence and spiritual relationships (Weesk and Hollander, 1999).

The Cree of Western James Bay historically are organized along kin lines, and small family groups would be responsible for traditional hunting areas (George *et al*, 1995). They were not largely a coastal people, where many of the present day communities are located, but spent most of the year inland, coming to the coast in the

spring to hunt migratory birds (Cummins, 1999). Many families would then head north to Cape Henrietta Maria where James Bay meets Hudson's Bay to hunt caribou that were plentiful on the coastal tundra (Cummins, 1999). In early fall they would start heading further inland to winter hunting grounds (Cummins, 1999). With the establishment of a Roman Catholic mission in 1893-94, and the Hudson's Bay Company soon following in 1901, the community of Attawapiskat began to take shape. The Catholic Church had a profound effect on the Attawapiskat Cree, resulting in "the almost complete eradication of aboriginal ritual as well as profound modifications in family life and marriage" (Honigmann, 1948: 15) by the 1940's. The Catholic Church remains a central institution in the community. However, the annual cycle still remained largely intact until the mid twentieth century, as anthropologist John J Honigmann conducting research in the 1940's observed in detail (1948). In his report, Honigmann states: "It cannot be said that the Attawapiskat Indians are strongly motivated to reach assimilation with Canadian society" (1948: 18), and later recommends that government development plans "be modified by, or adapted to, that annual cycle" (1948: 72), stating the importance of maintaining traditional values. His recommendations would, however, be largely ignored as government interventions generally reinforced settlement in the community.

While there had long been trade in furs, particularly through the Fort Albany post, the establishment of the Hudson's Bay Company and their competitor, Revillon Frères in 1906, created greater intrusions into the lives of the Attawapiskat Cree. Becoming more closely tied to the volatile nature of the fur trade market left the Cree vulnerable. They also had very different priorities for their participation in the fur trade than did their European counterparts. George and Preston argue, "higher prices for furs resulted in less

effort at trapping and furs traded, while a decline in fur prices brought an increase in effort and furs traded" (1987: 451). Thus it appears the Cree only traded for the goods they needed without trading for a surplus, what George and Preston call "subsistence trapping" (1987: 451). When the French company Revillon Frères opened a fur trading post in Attawapiskat in 1906 to compete with the Hudson's Bay Company, the Cree could demand a better price while trapping fewer furs. However, this was a less than ideal for both trading companies and Revillon Frères soon closed its operations when the rival Hudson's Bay Company purchased it in 1936 (Lytwyn, 2002; Cummins, 1999). This again gave the Hudson's Bay Company a monopoly on the coastal fur trade, but at a time when the international fur trade was in a fatal decline.

The extension of Ontario's railway system to the headwaters of major north flowing rivers in the late 19th and early 20th centuries meant that traders, trappers and prospectors from the south had much greater access to the James Bay lowland trapping grounds (George and Preston, 1987). These interlopers placed a greater strain on not only fur bearing animals, but also on larger game as they hunted for food and sport. Mining and forestry activities continually moved northward and impacted regional wildlife, particularly from loss of habitat, and threatened the ability of Aboriginal peoples in northern Ontario to sustain their way of like (Macklem, 1997). Declining fur prices that had the effect of increasing the need for the Cree to trap exacerbated the problem (George and Preston, 1987). Increased trapping efforts, coupled with incursions by southerners into the region, meant that by the time the fur market collapsed at the turn of the twentieth century many animal species important to the Cree were scarce (George and

Preston, 1987). This left the James Bay Cree destitute with both subsistence and trading economies gravely challenged on the eve of the Great Depression.

Treaty 9 was signed in 1905 and 1906 in part to gain protection from outsiders, and initially covered 130,000 square miles of northern Ontario (Macklem, 1997). The 1929-1930 adhesions to Treaty 9 added another 128,000 square miles to cover more than two-thirds of present day Ontario (Macklem, 1997). Attawapiskat was included with the Albany Cree in 1905; however they were not granted a separate reserve until the 1929-1930 adhesion. The treaty document was largely decided on in negotiations between federal and provincial governments before the treaty commissioners arrived, which gives rise to much doubt as to what was actually 'negotiated' in meetings with Aboriginal leadership (Cummins, 1999; Hookimaw-Witt, 1998). The Muskegowuk Cree envisioned Treaty 9 as a way to protect their lands and way of life, an assurance offered by the treaty commissioners (Hookimaw-Witt, 1998). However, the aim of federal and Ontario governments was to placate native populations while gaining greater access to northern resources. Treaty 9 marked the first time a provincial government was involved in treaty negotiations, and the Ontario government intended to ensure any agreements would not hinder their plans for resource development (Cummins, 1999; Macklem, 1997).

The 1940's and 50's saw Attawapiskat begin to change from primarily a summer residence to a full time community. With famine conditions on the land, the promise of government relief in the community meant that more people were residing there full time (Weesk and Hollander, (1999); George and Preston (1987). The institution of universal family allowances in 1945 provided much needed money, and further entrenched community life. Further services soon followed: a hospital was opened in 1951 and

weekly air service began in 1957. However, it was not until 1976 that the community's first school opened. While the increase in services available in Attawapiskat was largely welcome, conditions such as the requirement that children be in school full time in order to receive government relief, intentionally undermined land based activities. The numerous challenges to traditional activities of the Cree have resulted in substantial changes in their way of life. The reserve community is now the centre of social activity, and the land is perhaps more often visited than lived from. Despite this, Cree culture remains strong and distinct as subsistence activities are widely practiced and occupy a vital place in the community. In addition, the Cree language permeates in everyday life, attesting to their cultural autonomy.

With the first substantial industrial development now occurring near Attawapiskat, the continuance of Indigenous ways of life and Cree cultural autonomy again face serious challenges. How the Victor mine, and any other developments that may follow, impact the environment in all its manifestations will have profound consequences for their future. The environmental assessment process provides the forum within which Attawapiskat First Nation and other Mushkegowuk communities can attempt to ensure development provides a future they wish to see.

The Canadian Environmental Assessment Act and the Victor Mine

On August 22 of 2005, the environmental assessment of De Beers Canada's Victor Diamond Project received final approval by the federal government. Three

provincial level environmental assessments for off-site activities related to infrastructure to service the mine were approved by October 27th of 2005. Thus, the way was clear for De Beers to gain all necessary permits and begin construction on the nearly one billion dollar mine (De Beers *Factsheet*, 2006). This concluded "an exhaustive three-year process which involved extensive studies and reviews with contributions from technical and environmental experts, government departments, First Nations communities, the public and other stakeholders" (De Beers Media Release, August 22, 2005). A major component of the environmental assessment was the inclusion of Traditional Knowledge of Cree peoples in the area of the mine development. Victor Project Vice President Jeremy Wyeth described the environmental assessment as "a collaborative process" (in *Victor News*, 2005: 1), in which "First Nations communities along the James Bay Coast and specifically Attawapiskat provided Traditional Ecological Knowledge and regular input into the project design" (*Victor News*, 2005: 1).

The Canadian Environmental Assessment Act was passed by the federal government as Bill C-13 in June of 1992, but did not come into force until January of 1995. It was designed to replace the Environmental Assessment Review Process (EARP) Guidelines that had been in place since 1973, with the intention of clarifying the procedures and the conditions under which federal environmental assessment would be conducted. The Act was subsequently amended in June of 2003 with the goal of streamlining assessment procedures and improving public participation. Agreements have been made with provincial assessment regimes as well in order to harmonize regulations and avoid duplicating requirements. The Canadian Environmental Assessment Agency has two primary objectives: to "minimize or avoid adverse

environmental effects before they occur", and to "incorporate environmental factors into decision making" (CEAA, 2003). As such, the Act is intended to improve project design in such a way as to minimize environmental impacts. What it is not intended for is to stop certain development projects from proceeding. The Responsible Authorities can withhold permits until recommended mitigation measures are put into effect, and/or environmental impacts can be justified by the proponent (CEAA, 1992). This has the effect of delaying, but not necessarily stopping, project proposals that come under the act.

The types of environmental assessments conducted under the federal CEAA fall into three general categories: a screening process, comprehensive study, and mediation or a review panel. The bulk of federal EA's are screenings that are largely completed between the project proponent and Responsible Authorities, and have limited room for public participation. Comprehensive studies, under which the Victor Project falls, are generally applied to large projects that have the potential for extensive environmental impacts. While there is much more public consultation in a comprehensive study, decisions are still based on the Responsible Authority's interpretations. Review panels or mediation are conducted much like a comprehensive study, with the major difference that an independent review panel or mediator is appointed to guide the process and make recommendations to federal ministers. Joseph Castrilli states the federal environmental assessment process is characterized by "self assessment by the proponent department, and recommendations, not decisions, by expert review panels" (1999: 16). The problem of self assessment becomes amplified when an EA goes to the comprehensive study level as it is the proponents themselves who are still responsible for conducting the environmental assessment. The close nature of development proponents, and both federal and provincial

departments and ministries, creates a large conflict of interest as there is little independent research. In addition, Castrilli states, "public hearings are more like public meetings held by expert panels appointed to make recommendations, not decisions, on the proposal with few legal entitlements for members of the public to test the proponent's environmental information" (1999: 15). This seriously challenges environmental assessment as a valuable public exercise. Many observers have noted problems with public consultations that include "inaccessible information, overly technical discourses, and incomplete information" (Diduck and Sinclair, 2002: 579). Often the result is a summary that stresses, "development will have no impact" (Petts in Diduck and Sinclair, 2002: 579). The ability of the public to meaningfully participate at public meetings is constrained, as the point of the meetings appears to be to gain public approval and, by deferral to the experts, placate any fears the public may have without questioning the projects themselves. This has led to the impression that "decisions were forgone conclusions, and in such a case people will not participate or choose to participate in other ways" (Diduck and Sinclair, 2002: 579).

The scope of environmental assessment has grown far beyond its conception as an administrative tool. The Berger Commission is often hailed as the ideal environmental assessment, marked by its inclusiveness, the breadth of issues it covered, and for providing a place where voices otherwise excluded from development debates could be heard. While state governments may view EA as a technical exercise for coming to rational decisions that minimize environmental impacts and improve project design, the wider public, and Aboriginal peoples in particular, often view environmental assessments as vehicles for addressing much wider social, economic, and political issues. As such,

EA becomes as much about culture and empowerment as it is about mitigating environmental impacts. However, the contemporary environmental assessment regime is designed to prevent such outcomes as what resulted from the Berger Commission. Development is taken as a given as the CEAA is a regulatory measure to improve project design, not assess whether the development project in question is worthwhile. Thus, there can be a large discrepancy between what communities view as the purpose of participating in the environmental assessment process, and what governments and industry proponents imagine the process is for.

The relatively recent phenomenon of collaboration between development proponents and Aboriginal peoples fuelled hope for the Victor Project. Participating in the Victor environmental assessment and negotiating an impact benefit agreement with De Beers is intended to protect the interests of Attawapiskat First Nation. Both federal and provincial governments saw this development as a partial cure for the legacy of colonialism that plagues the First Nations communities of James Bay. As Ontario Premier Dalton McGuinty stated at the official opening,

> The Victor Diamond Project is great news for the people of Attawapiskat and the surrounding region...DeBeers' investment here means more than just new jobs. It will provide more opportunity for families, local businesses and First Nations communities (Ontario, June 19, 2006).

Whether the Victor Project provides a positive future, as suggested by Premier McGuinty, or is a further act of colonialism is dependant on how development decisions were made. While the Victor Project is presented to the public as an example of successful collaboration between industry, government, and First Nations, development projects have often been fraught with much more difficulty than their public face might

present. The environmental assessment process, which has become the main vehicle for determining development decisions, can be a lengthy and costly exercise that places great strain on the participants. The recent inclusion of Traditional Knowledge as a foundation for decision making in several environmental assessments, including Victor, has complicated this process further. The CEAA states that all cultures have Traditional Knowledge; however, the Traditional Knowledge of Aboriginal peoples is unique (Canada, May 7, 2004). Aboriginal Traditional Knowledge is defined by the CEAA as,

> A body of knowledge built up by a group of people through generations of living in close contact with nature. ATK (Aboriginal Traditional Knowledge) is cumulative and dynamic. It builds upon the historic experiences of a people and adapts to social, economic, environmental, spiritual and political change (Canada, May 7, 2004).

The CEAA notes that the terms "Traditional Knowledge" and "Traditional Ecological Knowledge" (TEK) are often employed interchangeably; however, they consider TEK a subset of Traditional Knowledge that is primarily concerned with the environment (Canada, May 7, 2004). It is the siphoning off of environmental data from the whole of Traditional Knowledge for environmental assessment purposes that is particularly problematic. A primary distinction of Traditional Knowledge is a holistic approach that is often contrasted to reductionist approaches employed by scientists. Thus, while Traditional Knowledge follows the characteristics outlined by the CEAA, social, economic, spiritual and political aspects are inseparable from environmental issues if Traditional Knowledge is to be fully considered. Traditional Knowledge has the potential to improve the knowledge base on which decisions are made, as well as making room for greater involvement of Aboriginal peoples than usual public participation measures allow. However, many issues arise when the knowledge of Indigenous peoples

is incorporated into a process dominated by scientists, business executives and politicians. Northern development in Canada is often the nexus around which these different ways of knowing come together, and environmental assessments are very much a formal expression of these debates.

Thesis Statement and Guiding Questions

The goal of my research is to analyse the environmental assessment process as it relates to the integration of science and Traditional Knowledge, and to examine if this process is of benefit to First Nations peoples and Indigenous ways of life. The Victor mine will be the first major industrial development in an area where traditional activities are a substantial component of the Aboriginal community. Therefore, the Victor Project's environmental assessment provides an excellent case study in which to investigate the effectiveness of incorporating Traditional Knowledge. My central question asks whether the participation of Aboriginal communities and the incorporation of Traditional Knowledge are empowering Indigenous peoples. By recognizing the depth of their knowledge and their authority in Traditional territories, the environmental assessment process has the potential to be a positive factor in the decolonization of Indigenous peoples' relationship with the Canadian state. However, the process must allow Aboriginal communities to be connected to decision-making and allow for development on their terms. Otherwise environmental assessments may simply be another method for gaining access to Indigenous territories and a contemporary tool that

furthers the colonization of Indigenous peoples. Examining how the Victor Project and its environmental assessment intersects with Canada's colonial legacy will help determine if the environmental assessment process is strengthening or undermining Indigenous communities.

The question of how the Victor Project is impacting Cree ways of life, and what its impacts might be in the future, is a fundamental concern to the community of Attawapiskat. The environmental assessment provided an opportunity to explore this issue from its inclusion of Traditional Knowledge, and its effectiveness in doing so is an indication of the value placed on Indigenous cultures. In order to determine the effectiveness of Traditional Knowledge in the Victor assessment, where and how it was incorporated in the process will be examined. This examination will question if Traditional Knowledge was accepted in its entirety and who had authority over its use. By examining how the environmental assessment process unfolded in this particular project, the nature of Traditional Knowledge will be investigated, how it is employed in the Victor environmental assessment will be examined, as well as how this process is serving the First Nations community of Attawapiskat.

An overriding concern is how the different epistemologies of Traditional Knowledge and Scientific Knowledge are being reconciled within environmental assessments. Traditional Knowledge and science represent very different ways of understanding the world and come from very different contexts. This makes their inclusion in the same process very difficult. This is further complicated by the fact that the bureaucratic and technical exercise of environmental assessment, and the industrial activity of mining, is not part of Indigenous traditions while science is inseparable from

them. The effectiveness of utilizing Traditional Knowledge in the Victor environmental assessment depends on whose goals provide the measure. Thus, the expectations and conclusions of the primary participants - namely De Beers, the federal and provincial governments, and Attawapiskat First Nation – will be examined.

While decisions made in environmental assessment are presented as factually based, they are ultimately political and reflect the power of the participants whose aims often run counter to and contradict one another. Indigenous peoples' relationship with their lands presents a stark contrast to that represented by industrial development. The idea that Indigenous peoples and the knowledge they possess are now a valuable component of development processes, rather than an obstacle, needs to be examined. For the exercise of including Traditional Knowledge in environmental assessment to be worthwhile to Indigenous peoples it must give strength to Indigenous ways of life. This may mean both protecting traditional ways and finding means of adaptation acceptable to Indigenous peoples. The risk, however, is that the process of including Traditional Knowledge is simply another form of co-option that will further the colonization of Indigenous peoples and their territories.

2. Traditional Knowledge and Environmental Assessment

The following discussion will review the literature on Traditional Knowledge and its relation to environmental assessment as it pertains to Aboriginal peoples in Canada. The focus will be on literature produced from the 1970s until present, as this period follows a significant rethinking of Aboriginal and non-Aboriginal relations in Canada. It also marked the institutionalization of environmental assessment policies in Canada at both the federal and provincial levels.

The review will begin with several studies that were important in establishing the relevance of Traditional or Indigenous Knowledge to environmental issues. While there is much research suggesting this prior to the 1970s, particularly in the field of anthropology, the idea that Indigenous peoples had much to offer current environmental debates was new. This will be followed by examining attempts at defining Traditional Knowledge and its relation to Scientific Knowledge. Science has often been the marker against which Traditional Knowledge is measured, while at the same time Traditional Knowledge provides a challenge to the hegemony of science as the only legitimate way of knowing the physical world. Finally, the recent incorporation of Traditional Knowledge into the environmental assessment process will be discussed. Here again science and Traditional Knowledge come up against one another, but this time supposedly to further the same goal of environmental stewardship. This discussion will include an examination of the issues surrounding the environmental assessments

conducted for the Ekati and Diavik mines in the Northwest Territories that preceded the Victor Project. The remote location of diamond exploration has meant projects such as these are entering areas with little industrial development, and where subsistence economies play a vital role. As such, Traditional Knowledge was particularly significant to the Ekati and Diavik environmental assessments.

Traditional Knowledge and its Relation to Science

While many researchers demonstrated significant interest in the knowledge of Native peoples in the early part of the twentieth century, by the middle of the 20th century "virtually no government agency, and few scientists, gave more than token acknowledgement to indigenous knowledge" (Bocking, 2005: 215). In the late 1800s and early 1900s, renowned anthropologist Franz Boas' research with Indigenous peoples of Baffin Island and British Columbia was groundbreaking in its recognition of the depth and complexity of Indigenous cultures. A.G. Bailey's study, *The Conflict of European and Eastern Algonkian Cultures 1504-1700*, published in 1937 combined the approaches of anthropology and history to examine the interaction of Indigenous peoples and early settler populations. Bailey rejected notions of European intellectual superiority, as did Boas, and demonstrates how early settlers and explorers were dependant on their Indigenous hosts. However, it is indicative of the coming era that such an important work was largely overlooked at its time of publication (Trigger, 1982), as the 1940s and 50s would see "the near-complete removal of indigenous knowledge from the northern

intellectual landscape" (Bocking, 2005: 218). This time period parallels the extension of Canadian government administration throughout the north, and new tools employed by scientists, particularly the airplane, for data collection that negated the perceived need for Aboriginal participation (Bocking, 2005).

By the late 1960s there was again an interest in academic circles in the knowledge of indigenous peoples. In particular, Richard K. Nelson's *Hunters of the Northern Ice* (1969) extensively chronicled knowledge and interaction with sea ice of the Inuit on the Arctic coast of Alaska. He states "Eskimos (sic) have made a ceaseless study of the ice, watching its every move, and experimenting with many different methods of avoiding its dangers", and as such, "have amassed a large body of knowledge" (Nelson, 1969: 10). Nelson's anthropological study speaks to a renewed interest in the academic community to engage with Indigenous cultures where significant gaps in research existed. The wealth of information available to northern researchers who are willing to work with Indigenous peoples was reflected in the depth of Nelson's study. However, as he is primarily concerned with the Inuit's interaction with sea ice, his interest in Traditional Knowledge is somewhat limited. Traditional Knowledge is not employed to challenge the academic orthodoxy by investigating Indigenous epistemologies. While there is a considerable amount of cultural information on local Aboriginal populations, Nelson is less concerned with cultural processes than with the empirical observations they will yield.

However, some researchers began investigating Indigenous Knowledge as a more dynamic and legitimate form of knowledge for grappling with contemporary issues. Several studies in the 1970s reflected the combination of ethnography and ecology

exemplified in Nelson's work in studies of Aboriginal peoples in Canada, but with more emphasis on resource management and the importance of subsistence economies. Peter Usher, working under the Department of Indian Affairs and Northern Development, examined the fur trapping economy of the Banks Island Inuit (*The Bankslanders*, 1971). He argued that there was a "sound ecological and economic basis" (Usher, 1971: Vol. 3, p. 70) for the fur trapping economy on Banks Island, and recommended supporting the fur industry without interfering with local autonomy. Usher soundly criticized the federal government for its neglect of the fur industry and support of oil and gas exploration without proper consultation at the local level. He argued the community at Sachs Harbour on Banks Island represented "the culmination of a way of life" with "a tradition of innovation combined with a fidelity to the 'old ways'" (Usher, 1971: Vol. 3, p. 14). Usher clarifies that by "old ways" he does not mean "the aboriginal ways of an unremembered past, but the traditional fur-trade way of life which lasted on the mainland well into the 1950s" (Usher, 1971: Vol. 3, p. 14). He does not view Indigenous Knowledge and ways of life as a relic of the past, as government interference in the community of Sachs Harbour appears to indicate. It is dynamic and of vital importance to contemporary life, and necessary to adapt to any future changes in the community.

In his investigation of Waswanipi Cree hunters (1973), Harvey Feit rebuked the notion that hunters exercise little control over their resources. Moose and beaver populations were managed "either by rotational use of the territories, or by an increased use of alternative resources" (Feit, 1973: 124). Further, the Waswanipi are able to manage their resources because of their "ecological system of knowledge" (Feit, 1973: 116). Feit states, "despite the difference in world views, the Waswanipi are recognizably

concerned about what we would call ecological relationships, and their views incorporate recognizable ecological principles" (1973: 117-18). Thus Feit recognizes that highly effective resource management systems are already in existence in northern regions, and that the knowledge Indigenous peoples possess in regards to ecological relationships is of great value to future management attempts.

Fikret Berkes furthered the recognition that indigenous peoples were effective managers of their resources. In his study of the Chisasibi (formerly Fort George) Cree fisheries conducted in the early 1970s, Berkes found that "the Cree fishery practice violated nearly every biologically orientated, indirect control measure in the repertory of scientific fisheries management" (Berkes and Fast, 1996: 216). There were no restrictions on gear and fish size, and fishing areas would be rotated based on highest return for effort (Berkes, 1977; Berkes and Fast, 1996). This has resulted in a successful "traditional" fishery that has adapted new technologies, which "cannot be explained simply on the basis of too few Cree to overexploit the fish stocks" (Berkes, 1977: 306). While scientific management of fisheries struggles with repeated failures, the Chisasibi fisheries have remained sustainable "based on social and ethical controls" (Berkes and Fast, 1996: 216). Berkes demonstrates that management decisions are and have been clearly considered in resource use, and that Aboriginal peoples have altered their practices in numerous circumstances under changing conditions (Berkes, 1999).

M.M.R. Freeman furthers the idea that it is "ecological" knowledge that underlies Indigenous peoples' ability to manage their resources effectively. In his study of management attempts in the Northwest Territories he demonstrates how the Inuit's knowledge of their environment goes far beyond the ability to simply identify and name

species. Rather, the Inuit "understanding is inherently ecological" (Freeman, 1979: 348). Freeman states: "they perceive the environment to be a complex system of interacting variables, and they appreciate well that interference with one part of the system has implications for the other parts" (1979: 348). While Freeman employs scientific language to describe Inuit knowledge of the environment, he notes distinctions between the knowledge of Indigenous peoples and that of formally trained scientists. He states that scientists "have a reverence for the reductionist approach to problem-solving that too often precludes any wider appreciation of the essentially ecological nature of natural events" (Freeman, 1979: 346). By contrast, Indigenous Knowledge is characterized by "a long time series of observations", and information "of a wide-ranging and supplementary nature" (Freeman, 1979: 346). These characteristics, Freeman argues, give Indigenous Knowledge a greater ecological understanding than is often exhibited in scientific studies (1979). As such, Indigenous people need to be included in resource management decisions as they already have a wealth of understanding and the ability to carry out further research (Freeman, 1979).

Indigenous Knowledge and science was further contrasted in a series of articles published by the Canadian Arctic Resources Committee in 1992. Freeman (1992) discusses some of the problems with scientists' environmental knowledge. First he points out the enormous complexity in attempting to understand the workings of ecosystems. Freeman states, "not only do such biophysical systems contain innumerable interacting components, or sub-systems, but the most basic parts (micro-organisms)...are largely unknown to science and for the most part ignored in the analysis (1992: 9). Secondly, ecosystems are subject to purely random events that create variability that can

be allowed for, but not predicted (Freeman, 1992). Finally, reductionist methods of science that "seek to understand organisms or nature by studying the smallest or simplest manageable part" (Freeman, 1992: 9) run counter to understanding the ecosystem as a whole. Traditional Knowledge, by contrast, "eschews reductionism, placing little emphasis on studying small parts of the ecological system in isolation" (Freeman, 1992: 9). Freeman notes that traditional systems of knowledge recognize the impracticality of reductionist approaches that require an impossibly immense amount of data to understand an ecosystem in such a disassembled way (1992). By employing an intuitive approach, TEK "is able to creatively fill in the knowledge blanks, an absolutely essential characteristic in those cases where knowledge is not just unknown but, in fact, may be unknowable" (Freeman, 1992: 10). Freeman notes that scientists themselves, particularly fisheries scientists, have come to question reductionist approaches. Much more emphasis is being placed on systemic relationships, outside of which isolated entities and phenomena "cease to be definable" (Freeman, 1992: 10). The similarities of this approach to TEK imply that science and TEK are not fundamentally irreconcilable, and that there is much room for finding common ground in the two approaches.

In discussing Dene Traditional Knowledge, Martha Johnson states that both science and TEK "require thoughtful and systematic observation to understand ecological processes", and "both seek to utilize resources in an ecologically sustainable manner" (1992: 3). However, where they differ is in "the different types of information gathered, how this information is interpreted and expressed, and the approaches to resource management" (Johnson, 1992: 3). In particular, it is the emphasis in science on

quantitative measures, while TEK is more concerned with qualitative information that distinguish the two approaches (Johnson, 1992).

Ellen Bielawski (1992) investigates problems in integrating Western science and Indigenous Knowledge. She points out that there are numerous initiatives to integrate the two in Arctic contexts, however there are many obstacles in figuring out how to do this. A major problem has been in simply defining exactly what Indigenous Knowledge or TEK actually is. In discussing her research with Inuit peoples, Bielawski states that one of the reasons for this may be that "Inuit knowledge resides less in what Inuit say than in how they say it and what they do" (1992: 7). Understanding the cultural context thus is crucial to TEK as it cannot be readily transmitted to those outside the community. A further problem is that while the "Inuit do not separate people from nature. Arctic scientists do" (Bielawski, 1992: 7). The conception prevalent among biologists and geologists that "people are overburden" (Bielawski, 1992: 7) refuses to acknowledge any value in Indigenous Knowledge beyond empirical observation.

George Hobson (1992) challenges the idea that there are inherent differences between Indigenous forms of knowledge and science, claiming "traditional knowledge is science". He too points to the problem of integrating Western and Indigenous Knowledge, stating that "an effective system must be developed to collect and classify native knowledge" (Hobson, 1992: 2). While Hobson recognises the validity of Traditional Knowledge, his emphasis is on transforming it into something relevant to southern scientists rather than on how southern scientists can transform their work into something relevant to Indigenous peoples. This exemplifies the difficulty of integrating TEK in a way that is not simply an appendage to scientific research. Hobson further

states, "means must be found to interpret such (traditional) knowledge so that it will be meaningful in other contexts without losing its essential native content and value" (1992: 2). This statement points to one of the central contradictions in scientific interpretation or integration of Traditional Knowledge. For Traditional Knowledge to be easily incorporated into scientific study it must be striped of its "native content and value". The characteristics that make the knowledge of Indigenous peoples unique, such as its localized meaning, spiritual content, and subjective interpretations, are difficult to reconcile with scientific goals of objectivity and universalization. This is why perhaps integration with science should not be the key goal when encountering Traditional or Indigenous Knowledge. While some aspects of Traditional Knowledge can and does easily relate to scientific investigations, it is aspects that do not readily relate to science that can be of greatest value in that they expand beyond what scientific interpretations alone can do.

Julie Cruikshank discusses the relationship between Native oral traditions and Western scientific research. She states "science and oral tradition provide two distinct approaches to knowledge, developed in two different institutional settings and based on markedly different premises" (Cruikshank, 1981: 86). Thus, not only oral tradition is bound by its cultural context, science is as well (Cruikshank, 1981). However, while science tends to focus on the accumulated "written contributions of different individuals", oral tradition represents "the collective social thinking of the group" (Cruikshank, 1981: 86). Cruikshank sees considerable overlap between the two epistemologies and argues that together they can form a more complete knowledge base. For this reason, she sees local participation in research and development as necessary. However, Cruikshank

warns against simply applying local knowledge as an adjunct to Western science as "short-sighted, if not exploitative" (1981: 86). The exploitation of Indigenous Knowledge by outside investigators for external priorities has led many Aboriginal communities to closely guard the intellectual property rights of their knowledge.

Another problem is that often science is presented as *the* truth, against which Indigenous Knowledge must prove itself. This positioning is evident in works by both R.E. Johannes (1993) and Leonard Tsuji (1996). Johannes states, "a flagrant deficiency in much of the literature describing traditional ecological knowledge is the absence of any effort to determine its validity" (1993: 36). He voices the perception that local experts will "embroider the facts" and "exaggerate the environmental significance" of certain areas in order to gain greater concessions, and that "some individuals who are not TEK experts may pretend to be" (Johannes, 1993: 36). Johannes postulates the scientific community must validate Indigenous Knowledge or else it may be dismissed. His suspicion of TEK demonstrates Johannes own lack of understanding in regard to Indigenous Knowledge. While it may be useful to the work of scientists to verify aspects of TEK, it is not up to the scientific community to validate Indigenous Knowledge. Only communities that are the source of Indigenous Knowledge can undertake that task. It is more beneficial for scientists engaged with Indigenous Knowledge to ask why there are different views and how they can be reconciled, rather than accepting or dismissing the knowledge of Indigenous peoples based on scientific standards created outside the community.

Tsuji demonstrates the same privileging of scientific criteria. He states: "it must be shown that traditional ecological knowledge has *scientific* (emphasis in original) merit,

being in some sense *factual* (emphasis in original) rather than just anecdotal" (Tsuji, 1996: 68). Further,

> Although traditional ecological knowledge is important in its own right, it cannot replace western science. However, traditional ecological knowledge can be used as a starting point (or can be added to existing data bases), to help facilitate the direction and approach western science takes to a resource management problem (Tsuji, 1996: 75).

In other words, Indigenous peoples will be consulted, but will not make resource management decisions. That is still the privileged sphere of scientific management. Even though Tsuji and Johannes make significant strides in validating the utility of TEK, they do so without challenging the limitations of science itself. TEK is reduced to data rather than a fundamentally different way of understanding nature. It is this divide between the scientific management community that sees TEK largely as a source of baseline information and empirical data that can be added to scientific findings, and Aboriginal communities that insist Indigenous Knowledge is corrupted when taken out of its context and placed in the realm of Scientific Knowledge. Many argue Indigenous Knowledge cannot be separated from the way of life it originates from, and must remain connected to its spiritual and cultural aspects. As Marie Battiste and James (Sa'ke'j) Youngblood Henderson remark, "Eurocentric thought must allow Indigenous Knowledge to remain outside itself, outside its representation, and outside its disciplines", as "Eurocentric contexts cannot do justice to the exteriority of Indigenous knowledge" (2000: 38). Thus the scientific and academic communities need to understand, appreciate and respect Indigenous Knowledge, but they cannot capture it.

Paul Nadasdy demonstrates how even apparently straightforward concepts, such as respect, can have profound differences between Indigenous and non-Indigenous peoples. Nadasdy argues that the Yukon government's interpretation of respect in hunter-animal relationships is summarized in the slogan "take only what you need...use everything you take" (Yukon Department of Renewable Resources in Nadasdy, 2003: 81). While "the injunction against waste is an important part of the First Nations concept of respect", notes Nadasdy, "the concept is far richer and more complex" (2003: 81) than indicated by the slogan. Nadasdy discusses debates over catch-and-release fishing as illustrative of his point. While many biologists and sport fishers advocate catch-and-release, Aboriginal peoples often view the practice as disrespectful (2003). Nadasdy states many Aboriginal people see this as "playing with the fish" who come as a gift (2003: 82). Not to accept this gift is an insult which will result sooner or later in the fish no longer offering themselves (Nadasdy, 2002). This implies a fundamentally different relationship with wildlife that frames the practice of hunting and fishing. These practices are definitely not a sport to Indigenous peoples. In addition, the research methods of scientists are often seen as unduly interfering with wildlife populations. Tagging animals and surveys by airplane or helicopter are seen as a disrespectful intrusion that may result in driving the species away.

In relation to problems with scientific engagements with TEK, Leanne Simpson notes how the spiritual foundations of TEK are often ignored in favour of generating baseline information in areas where scientific data is lacking (2004). The emphasis on TEK for purely practical reasons has frustrated those who are seeking "an opportunity to indigenize environmental thinking and policy to the betterment of both Indigenous and

non-Indigenous Peoples and to advance the agenda of decolonisation and liberation" (Simpson, 2004: 347). The overt agenda that Simpson expresses for the inclusion of Indigenous Knowledge in decision-making comes in conflict with those who believe objectivity should guide decisions. However, as Stephen Bocking notes, decisions involving the environment inevitably involve subjective choices and value statements (2004). Simpson also remarks on the importance of language in articulating "Indigenous worldviews, values, conceptualizations, and knowledge" (2004: 377). Oral traditions are integral to the dissemination of Indigenous Knowledge that can escape simple transcription. It is the numerous ways in which Indigenous Knowledge and culture do deviate from scientific norms that may provide the greatest insights, and it is these elements that need an environment in which they can operate. As Simpson states, "Indigenous Knowledge must be lived" (2004: 381), therefore any attempt to include Indigenous Knowledge must also protect Indigenous ways of life.

Deborah McGregor remarks that the Aboriginal view of Traditional Knowledge, as different from academic interest in Traditional Knowledge, "reflects an Indigenous understanding of relationships to Creation" (2004: 386). She states: "to understand where TEK comes from one must start with Indigenous people and our own understanding of the world" (McGregor, 2004: 386). This does not begin, McGregor states, "with the arrival of newcomers (as) there were already well-developed philosophies or conceptual frameworks, ethics, and values that had flourished for thousands of years" (2004: 386). Traditional Knowledge as such is "a way of life, a relationship that requires doing" (McGregor, 2004: 396) that has evolved and adapted since Creation. McGregor states, "TEK is not just knowledge *about* the relationships

with Creation, it *is* the relationship with Creation (2004: 394). This is often at odds, McGregor points out, with the goals of non-Aboriginal researchers who "are more concerned with what the knowledge consists of and how it is transmitted" (2004: 394). The result is that "fundamentally, there is a lack of shared meaning between Aboriginal and Eurocentric thinkers as to what is meant by TEK" (McGregor, 2004: 397).

To draw conclusions that exalt Indigenous Knowledge as the ideal form of knowledge, and paint science as irreparably flawed, miss the point that there is more than one way to understand nature. Any form of knowledge presents challenges in its application and can be subject to abuses when unquestionably accepted. However, science cannot ignore its connection to powers that have threatened Indigenous cultures and devalued Indigenous Knowledge. Linda Tuhiwai Smith in *Decolonizing Methodologies* (1999) argues that "Western knowledge and science are the 'beneficiaries' of the colonization of indigenous peoples", and that "knowledge gained through our colonization has been used, in turn, to colonize us (Indigenous peoples)" (1999: 59). Therefore it is the scientific community and the political actors they inform that need to redress their relationship with Aboriginal peoples if they are to decolonize research activities and other acts of gaining knowledge that involve Indigenous peoples. One means necessary for Traditional Knowledge to be effective in processes that engage both Traditional and Scientific Knowledge is that it needs to be tied directly to decision-making authority. If instead Traditional Knowledge is only regarded as information to be taken into consideration by external authorities, it will do little to empower Indigenous communities to shape their own future.

Traditional Knowledge, Environmental Assessment and Diamond Mining

Since the 1970s, Aboriginal peoples have had a close involvement with environmental assessments in Canada. Claudia Notzke (1994) notes that attempts at environmental impact assessments challenge the role of science, as uncertainty is a fundamental characteristic of EA. Further, "impact assessment is rendered even more difficult by the fact that it is a thoroughly anthropocentric and socio-political process" (Notzke, 1994: 267). While this may be an obvious aspect when considering social impacts, Notzke argues "subjective value judgements play no less a role when it comes to the consideration of potential impacts on the physical environment" (1994: 267). As it is impossible to study all potential impacts, the choice of Valued Ecosystem Components (VEC) central to environmental assessments from the outset demonstrate how political the process is. It is in establishing the terms of reference for impact assessments when the kinds of knowledge that will be sought are outlined, that is often argued to be too restrictive by Aboriginal peoples (Notzke, 1994). Notzke notes that non-Aboriginal people share many of the concerns, particularly in relation to community participation in the design and implementation of the environmental assessment process (1994). However, differences over what is significant and what knowledge is relevant are much more acute when environmental assessments involve Aboriginal peoples. Notzke argues assessments of development projects have traditionally been built on a modernization/acculturation model that downplays or ignores the importance of subsistence activities, and as such, have failed Aboriginal people in predicting impacts (1994). Nevertheless, Aboriginal peoples have utilized environmental assessment to gain

direct access to decision-making processes and raise their agenda. Notzke points to several examples, including the Berger Commission and the Great Whale hydroelectric impact assessment in northern Quebec, where this occurred. However, the successes Aboriginal communities have had in influencing project decisions appear to occur in spite of, rather than because of the environmental assessment process. The extensive and public testimony offered during the Berger Commission Inquiry is something the federal government is reluctant to repeat, and with Great Whale the project was halted because of the public relations campaign that targeted Quebec's market for hydroelectricity. The environmental assessment process more often has the effect of containing widespread dissent as it internalizes the issues related to particular projects into the regulatory processes.

The ability of Aboriginal peoples to utilize impact assessments, either to further land claims or gain control over resource development in their traditional territories, has sparked some observers to dismiss Indigenous Knowledge as little more than a political ploy. Albert Howard and Frances Widdowson attacked the use of Traditional Knowledge in environmental assessments as an "imposition of religion on Canadian citizens", and stated, "the importance of TK lies not in its understanding of environmental impacts but in an ability to extract money from the government" (1996: 34-36). In defending their claims, Howard and Widdowson point to the ceremonial killing of one whale calling it "unsustainable harvesting", and do not differentiate it in any way from industrial whaling (1996). They also describe it "astonishing" that Aboriginal leaders could consider TK intellectual property, denigrating its value and sophistication (Howard and Widdowson, 1996). Howard and Widdowson take what differentiates Traditional Knowledge in order

to dismiss it based on Western ideology that calls for a separation of church and state. The only things of value they see in TK are the empirical observations that are already a part of science; therefore there is no need for Indigenous Knowledge or people to be a part of environmental assessments.

In response to the Howard and Widdowson article, Marc Stevenson charged that it was not Traditional Knowledge but "ignorance and prejudice" that threaten environmental assessment (1997). While Howard and Widdowson argue the empirical knowledge of Aboriginal peoples "is just a basic form of knowledge which anyone can acquire" (1996: 35), Stevenson points out "how these observations and experiences are interpreted, and given meaning and value, is culturally determined" (1997: 27). Stevenson further states:

> As gender-based dominance relations and western concepts of *man* (emphasis in original) and nature, which derive largely from Christian ideology, are programmed into scientific knowledge, (science) may be just as value-laden and culturally scripted as TK. Perhaps the crucial difference between the two is that scientific knowledge pretends to be objective and value-free, while TK makes no such claim, and indeed celebrates the contrary (1997: 27).

The arguments of Stevenson as well as Howard and Widdowson point to the necessity in uncovering ideological assumptions imbedded in the environmental assessment process. Bruce Morito points out that the article paradoxically has raised the profile and quality of the arguments over Aboriginal values and rights (1997). Morito argues for a value-generated policy framework that is "based on appropriate terms of reference which are developed from the values up", as all policies and programs "are expressions of underlying values, whether they be explicitly stated or implicitly directive" (1997: 45).

While the arguments of Howard and Widdowson lack credibility in academic circles interested in Traditional Knowledge, their views may be reflective of some of the scientists, consultants, and mining proponents who are required to engage with Traditional Knowledge in the environmental assessment process. Paul Nadasdy discusses in *Hunters and Bureaucrats* (2003) how informal or private discourse about Traditional Knowledge often reveals much scepticism. He states, "more than once I have heard scientists and resource managers say that TEK is simply a political ploy invented by Aboriginal people to wrest control of wildlife from 'qualified' scientific managers" (Nadasdy, 2003: 118). Nadasdy quotes one biologist as stating Traditional Knowledge is "too fluid and dependant upon individuals" (in Nadasdy, 2003: 195) to be integrated with science, and another biologist who indicated "the only value she sees in consulting with Aboriginal elders is that she must do so in order to secure community support for her projects" (Nadasdy, 2003: 118). If scientists who are actively involved with Aboriginal communities in processes, such as an environmental assessment or resource co-management, privately dismiss the value of Traditional Knowledge, the participation of Aboriginal peoples is undermined. This is particularly so when those who do not fully value Traditional Knowledge are making decisions on how it is incorporated with scientific information.

Fuelling debate over the value of Indigenous Knowledge in environmental assessment was the federal government's decision to include TEK on an equal footing with science in the assessment for the BHP Ekati diamond mine in the Northwest Territories. Ekati was very much an experiment into how this could occur, and posed great challenges for those involved. Andrew Nikiforuk argues that even though the

federal government had no clear idea of what Traditional Knowledge was, they included it in the BHP assessment, leaving it up to the proponent to figure out how to incorporate both Traditional Knowledge and science (1997). He argues that neither the environment assessment panel nor BHP truly considered Traditional Knowledge, which Nikiforuk simply describes as "a people's memory of the land" (1997: 13), in the assessment process.

Marc Stevenson, who was involved in formulating how Traditional Knowledge would be included in the BHP project, draws different conclusions. While many difficulties were encountered, Stevenson argues the effort was not without substantial success in identifying how TEK should be included in environmental assessments, and how Aboriginal peoples are well suited to engage in the kinds of questions impact assessments ask. He draws attention to the fact that Indigenous Knowledge is contemporary, as perhaps all knowledge is, and contains both traditional and non-traditional elements (1996). He states:

> Not only have many aboriginal people experienced both traditional and non-traditional realities and lifestyles, and felt directly the impact of industrial development, but they have already worked out many of the conflicts between the two systems of knowledge in their own minds (Stevenson, 1996: 281).

Therefore, Aboriginal peoples' knowledge of both traditional and contemporary realities is extremely valuable and necessary to making environmental assessment more meaningful.

Marie Roué and Douglas Nakashima make a similar argument on the nature of Indigenous Knowledge and impact assessment. In investigating Cree ecological knowledge, they find the Cree already have a good notion of what an impact assessment

means, and rather it is the scientists who have struggled with the concept. Roué and Nakashima state, "like numerous other indigenous peoples, the Cree are not in need of a paradigm revolution to become interdisciplinary", as "the elders who constitute the indigenous experts have always possessed an integrated and systemic vision of the functioning of the ecosystems" (2002: 346). Indigenous Knowledge thus becomes more than an appendage to the concept of environmental impact assessments, and instead can be seen as providing the framework for assessments to occur.

John Sallenave states "two of the fundamental limitations of northern EIA's are the lack of adequate ecological baseline data and the lack of an adequate framework or method to link ecological and social components of the environment" (1994). By incorporating TEK and giving Aboriginal peoples "greater decision-making powers concerning EIA research and policy" (Sallenave, 1994), environmental assessments can address these shortcomings. However, the reductionist approach that frames environmental assessments which "break(s) down each study into various biophysical components, which are then measured and evaluated independently from one another and from the human components" (Sallenave, 1994), is contradictory to a holistic view attributed to indigenous ways of thinking. Battiste and Henderson argue that the possessors of Indigenous Knowledge "often cannot categorize it in Eurocentric thought, partly because the processes of categorizations are not part of Indigenous thought" (2000: 35). It is not that Indigenous thinking does not categorize phenomena in any way, but rather that the bureaucratic and scientific categorization of both the substance and the process of environmental assessment is often antithetical to Indigenous traditions.

The importance of women as holders of Traditional Knowledge is a facet that is often underrepresented in development discussions. The Dene Cultural Institute states that "women sometimes are the only holders of Traditional Knowledge about specific and significant areas of biodiversity" (Brockman, 1997), a conclusion supported by Ohmagari and Berkes (1997). In a study conducted by Linda Archibald and Mary Crnkovich of the Voisey's Bay Nickel Project, they argue, "it was actually through the public environmental assessment process that Inuit women had the greatest opportunity to speak out on their concerns with the project" (1999: 2). Otherwise, concerns of women were largely incidental to discussions about the project and were absent in the negotiations leading to the environmental assessment (Archibald and Crnkovich, 1999). Dorothy Goldin Rosenberg argues Traditional Knowledge is well suited to the goals of feminism, which "challenges patriarchal institutions of power", and "draws links between violence against women and against the earth" (2000, 138). Ecological feminism in particular, "draws from traditional knowledge, which views all of life as an interconnected web enriched by diversity" (Rosenberg, 2000: 137). However, Traditional Knowledge in management and impact assessment processes are largely limited to the activities and input of hunters, which most often is a role filled by men. The privileging of male roles in Traditional Knowledge studies, and the greater economic inequity between genders that wage employment in heavy industries, such as mining, bring to Aboriginal communities, is resulting in significant impacts on women and families in general. A study conducted by the Status of Women Council of the Northwest Territories (SWNWT) that investigated women's views on their experience with mining found that "the current perception among many women is that companies are not interested in hiring women

other than as cleaners and cook helpers" (1999: 4). In addition, the rotational work schedule favoured by mining companies means that "in some cases 24-hour child care for two weeks a month is needed if women are to work at the mines", creating for women "a disincentive to working" (SWNWT, 1999: 6). As women are often those primarily responsible for children, the lack of suitable child care in many communities means not only a barrier to employment, but a barrier to training programs necessary for better paying jobs (SWNWT, 1999). In many Aboriginal communities where women have traditionally had strong leadership roles, the inequity development may bring is a threat to traditional social structures.

Despite many positive developments, Susan Wismer (1996) contends environmental assessment has not served Aboriginal communities well. She discusses the many difficulties faced, such as language barriers, extensive time commitments, the need to analyze numerous documents, time frames too restrictive to properly assess information, and deadlines that gave little consideration to other activities in the community (Wismer, 1996). Many Aboriginal communities have found this an exhausting process that distracts the community from other activities. Wismer states, given that the Ekati mine proceeded as predicted without adequately addressing the concerns of Aboriginal peoples, "it is tempting to conclude that participation in the exercise of environmental assessment is simply not worthwhile" (1996: 15).

One of the difficulties with integrating TEK is the lack of clear understanding of what aspects are being expressed to outside researchers. Peter Usher (2000) suggests that for purposes of environmental assessment, TEK needs to be separated into facts based on observation and hypotheses that can be verified, and cultural values and norms. Both

need to be considered in assessments; however, cultural aspects cannot be subject to verification tests, although they do need to be authenticated (Usher, 2000). Usher criticizes methods to document TEK that present it as "a random collection of utterances" which does not "distinguish clearly between observations and inferences" (2000: 189) as the whole accounts are easily discounted as anecdotal or unreliable by those unfamiliar with TEK. While Usher's statements can be interpreted as making Indigenous Knowledge conform to Western expectations, perhaps it is a necessary concession in order for TEK to gain more stature and influence over the assessment process. However, his suggestion for separating aspects useful to scientists from cultural values and norms, and attempting to "fit TEK to existing environmental assessment and management processes" (Usher, 2000: 192), has resulted in a bureaucratization and categorization of Traditional Knowledge that has not recognized the authority of Indigenous communities. Traditional Knowledge incorporated in this manner fulfills external mandates, not necessarily those of Indigenous peoples.

The first experience with formally incorporating Traditional Knowledge into the environmental assessment process in the review of the Ekati diamond mine highlighted many of the difficulties discussed previously. The Review Panel reported that giving "full and equal consideration to traditional knowledge...proved to be one of the most challenging aspects of the review" (Canada, 1996: 14). In the Ekati EA, it was the project's proponent that was "given the task of determining how to incorporate traditional knowledge into the gathering of baseline information, impact prediction, and mitigation and monitoring plans" (Canada, 1996: 14). The proponent, BHP, stated that it incorporated Traditional Knowledge in two primary ways: conducting a Traditional

Knowledge study, and by involving Aboriginal people in the data collection (Canada, 1996). Both the Environmental Assessment Panel and the proponent, BHP, admitted that Traditional Knowledge was not fully considered. This was stated as largely a fault due to the lack of direction from government. Nevertheless, the Panel commended BHP for its efforts even though they acknowledged BHP had attempted to side step much of the process in order to submit their report more quickly.

The Canadian Arctic Resources Committee (CARC) raised several issues with the Ekati environmental assessment process, and concluded the assessment "has not been comprehensive, rigorous, or fair" (CARC, 1996). CARC cites underfunding of public participation and review components, short time frames for public review, lack of time and resources to properly conduct Traditional Knowledge research, and the narrow context under which community meetings were conducted (1996). While CARC is particularly critical of how Traditional Knowledge was incorporated into the environmental assessment, they add, "in fairness to the proponent, it was not something it alone should have been asked to do" (1996). Rather, "the documentation of traditional knowledge must be done by Aboriginal communities" (CARC, 1996). The reliance on the proponent to determine how Traditional Knowledge will be incorporated in an environmental assessment raises fears of how and to what purposes Traditional Knowledge will be employed. Squeezed between narrow time constraints and insufficient funding, and within a process that is decided upon and directed from outside Aboriginal communities, it is clear from the Ekati experience that there is a long way to go before any claim of "full and equal consideration" of Traditional Knowledge can be made.

Florence Catholique, who was a negotiator for Lutsel K'e First Nation during negotiations with BHP for the Ekati mine, points out that,

> Lutsel K'e Dene First Nation was given only 60 days to negotiate an Environmental Agreement, a Socio-Economic Agreement, and an Impact Benefit Agreement. The short timeframe and the fact that the community was not given appropriate resources to prepare properly resulted in agreements that are very weak (in Weitzner, 2006: iii).

She further states, "we are not against development but it shouldn't be done at our expense" (in Weitzner, 2006: iii). The experience of negotiating multiple complex agreements and participating in environmental assessment processes is extremely taxing for many First Nations that have neither the financial ability nor the experience with what developers propose to do on their lands. The question arises as to whether participation by local populations in the environmental assessment process and related agreements is a means for the proponent to clear the way for development by containing dissent. What the Ekati development did do is increase tensions within the community as conflicts developed between people and the leadership, between those for and against the mine, youth and Elders, and between other First Nations as they had to compete for compensation (Weitzner, 2006). And in the end, at least with Lutsel K'e, "the leadership did not feel it had an option to say no to the mine" (Weitzner, 2006: 10). All these factors account for a very weak bargaining position from the perspective of First Nations.

With the proposal for the Diavik mine by British company Rio Tinto and its Canadian Partner, Aber Diamond Mines, many of the problems associated with the Ekati development reappear. Again, the federal authorities mandated the proponent to "fully consider Traditional Knowledge where appropriate when assessing the effects of the

project" (Canada, 1999: 86). However, Traditional Knowledge studies conducted in conjunction with the environmental assessment were not completed by the time the Diavik proponents submitted the comprehensive study. Thus, instead of informing and guiding the EA process at a fundamental level, only preliminary reports were considered. Once completed, the Traditional Knowledge studies would be applied to "monitor, measure and manage impacts" (Canada, 1999: 87) as the project proceeded. Despite numerous issues raised by Aboriginal participants, the responsible authorities concluded Aboriginal interests were well represented and sufficiently funded to provide for meaningful participation, and their concerns had been addressed. Some of the issues raised were: insufficient data collection, with no Traditional Knowledge input from the North Slave Métis alliance (NSMA); no follow-up to community meetings to verify Diavik's interpretation of the issues discussed; unbalanced information that emphasised positive potentials and downplayed negative effects; and that any comment made by an Aboriginal Elder was considered "traditional knowledge" by the proponent (Canada, 1999). The proponent's lack of rigour in its study of Traditional Knowledge would be unacceptable in scientific studies, indicating the value both the proponent and government officials placed on Traditional Knowledge. By considering all comments made by Aboriginal Elders as Traditional Knowledge, the proponent was able to pick comments that were less controversial or supported the proponent's purpose, could emphasize dissenting opinions to neutralize significant issues, and demonstrated that the proponent either did not understand or respect Traditional Knowledge as its interpretation was not in the hands of the communities.

CARC in responding to the *Comprehensive Study Report* of the Diavik Diamond Project, pointed to the work of the Berger Commission as providing "critical guidance for a future review panel" (1999). Others, such as Wismer (1996) and Paci *et al* (2002), have cited the work of the Berger Commission as a model for northern EAs when discussing recent diamond mining developments. However, CARC concludes, "the 1990s approach to diamond development is failing to heed the lessons of the 1970s", as CARC instead "believes we are losing ground" (1999). This is evidenced by CARC's conclusion that the Diavik environmental assessment "does not ensure that development occurs with minimal impact to the environment. To the contrary, compared to the alternatives, the CSR endorses the alternative having the greatest impacts on the environment" (1999).

A further criticism of how diamond mining is unfolding in the Northwest Territories is that "the various projects in the region are considered only case by case, without an analysis of the cumulative and long-term effects" (Ritter, 2000: 25). The long-term development patterns are of fundamental importance to maintaining traditional ways of life. By considering each project in relative isolation, proponents are able to reset the environmental baseline to the beginning of each project, minimizing the appearance of major impacts, while continually eroding the land base necessary for traditional activities, and compromising northern ecosystems. Archibald Ritter notes that more mining projects are likely in the Northwest Territories, and with the Mackenzie Gas Project becoming a reality, more infrastructure development will also be needed (2000: 25). The resulting "aggregated environmental effects may well be significant, even though each individual project's impacts may be small or subject to mitigation" (Ritter, 2000: 25).

Development as it is unfolding in the Northwest Territories is posing numerous challenges to Aboriginal communities. Fly in programs to mine operations for employees has resulted in fears "that families will relocate from the community to larger centres with better facilities since the mine employment can be accessed from any community" (SWNWT, 1999: 7). This threatens to undermine communities economically as those who are wage earners leave, and culturally as those who move to larger centres and work in wage labour will be challenged to retain their cultural distinction.

While Traditional or Indigenous Knowledge appears to be firmly entrenched in northern research and policy communities, the danger to Aboriginal peoples is that incorporation into bureaucratic processes is further colonization. Seminal scholars, such as Harold Innis in his studies of Canada's economic history and his later interest in oral traditions, actively investigated the intersection of Aboriginal traditions, the Canadian state and international economic forces. Innis recognized the danger inherent in local population's engagement with dominant powers, as he "came to see colonialism as simultaneously economic and intellectual" (Cruikshank, 2005: 62). As Cruikshank notes,

> a crucial feature of administration in the hinterland...is the classification and control of activities and the authorization of official observations, categories, and statistics in written texts. While this process is conventionally rationalized as producing knowledge and serving the interests of those administered, it invariably occurs at the expense of existing regional traditions (2005: 62)

The recent interest in Traditional Knowledge and attempts to incorporate it into the environmental assessment process run the risk of undermining the very foundations of Indigenous ways of life. Those who possess Traditional or Indigenous Knowledge must

be a significant part of the decision making process in order for development to be empowering to Indigenous peoples. Otherwise the risk that including Traditional Knowledge in environmental assessment processes will amount to an "intellectual colonization" is great. The experiences at Ekati and Diavik may be important early steps in establishing a new context for development that is more inclusive of Indigenous peoples; however, both assessments failed to deliver on their promise. Traditional Knowledge in both the Ekati and Diavik environmental assessments remained little more than data in a process created, administered, and acted upon by external and vested interests.

3. Research and Methodology

The environmental assessment of De Beers' Victor Diamond Project is an extensive, comprehensive level assessment that was required to incorporate Traditional Knowledge throughout the study. As the incorporation of Traditional Knowledge into northern environmental assessments is becoming the norm, the Victor Project provides an excellent case study to examine its effectiveness. Modeled as a scientific process to minimize environmental impacts and improve project design, the environmental process is also inherently political, particularly as it relates to mining of resources in Aboriginal territories. The Victor Project as it is in the traditional territories of the Attawapiskat Cree, highlights the challenges Aboriginal communities face when engaging with the environmental assessment process.

The primary methods employed in this thesis research were the collection and analysis of documents related to the Victor environmental assessment, and interviewing in the First Nation community of Attawapiskat. The documents and interviews together have provided for reflections from community members, and has enabled an analysis of the environmental assessment process as it unfolded. This chapter will discuss the documents and their analysis, the interview process and field research in Attawapiskat, and some of the limitations of the research project. The research examines how the environmental assessment process serves Aboriginal communities, and as such, investigations were centred on the perceptions of Attawapiskat First Nation members.

On the issue of Traditional Knowledge, I take the position that it is the members of Attawapiskat First Nation who determine how effectively it has been incorporated into the environmental assessment of the Victor Diamond Project.

Documents

The *Victor Project: Comprehensive Study Report* issued by the Canadian Environmental Assessment Agency on June 10th of 2005 was the end product of years of research, consultation, preliminary reports and revisions. Natural Resources Canada (NRCan) was required to establish a public registry as part of their mandate as lead responsible authority (RA). The lead RA is in charge of overseeing the assessment with input from various other government departments and agencies. All documents pertaining to the Victor comprehensive study environmental assessment were made available in the registry for public viewing. Thus, the registry contains any technical studies, correspondence, meeting minutes, public responses and reviews conducted in relation to Victor's assessment. In addition, the registry holds copies of the assessment guidelines and the Comprehensive Study Main Report released by De Beers on March 8th of 2004. As such, the public registry provides substantial documentation to demonstrate how conclusions in the environmental assessment were arrived at.

After contacting Natural Resources Canada Administrative Assistant Penny Anderson, I made arrangements to view the entire registry at NRCan's offices in Ottawa in August of 2006. During my visit I scanned all of the approximately 500 documents

held in the public registry that range from single page letters to several hundred page reports, including the main Comprehensive Study reports themselves. Any documents that related to discussions of Traditional Knowledge or Aboriginal participation more generally were selected for further examination, numbering about 80 postings to the registry. The documentation gives evidence of the political environment within which the environmental assessment unfolded, and provides a record of the concerns raised by Attawapiskat First Nation as well as other affected parties. The public registry for the Victor environmental assessment was a key tool in examining the process, providing a wealth of information.

The documents contained in the public registry are intended to render the environmental assessment process as transparent as government representatives deemed necessary in setting the guidelines for the Victor EA. In addition, the *Comprehensive Study Report* is posted on the CEAA's website, and the *Comprehensive Study Environmental Assessment* and supporting technical documents produced by De Beers are posted on the De Beers Canada website. Therefore, there is a substantial amount of documentation detailing the environmental assessment process for Victor, and this provides a record of research and consultation from which decisions were made.

The documents were examined with the intention of determining how the First Nations communities were consulted and contributed to the environmental assessment. Major concerns were identified, as well as what was hoped would be the outcome of the process. Responses to the issues raised by Attawapiskat and other Mushkegowuk First Nations are analyzed. The process of incorporating Traditional Knowledge is examined in greater detail, including an investigation of the methods in which De Beers claims to

have gathered and applied Traditional Knowledge, and the remarks of First Nations representatives on the issue.

Interviews

In order to conduct my research in Attawapiskat the approval of the First Nation's Chief and Council was sought. This was in addition to approval by the Trent University Research Ethics Board, who assented to my research proposal on July 21, 2006 (See Appendix). I first contacted Deputy Chief Miriam Wesley in March of 2006 by phone and sent a letter outlining my research. I was directed by Miriam to Attawapiskat First Nation's Lands and Resources Director Suzanne Barnes, to whom I sent a detailed research proposal. Suzanne presented my proposal to the Chief and Council and approval was granted to proceed with my research on August 23, 2006 (See Appendix).

Following approval by Attawapiskat First Nation, interviews were conducted with several community members who are associated with issues concerning the Victor Project. The interviews included: band council members and hired staff familiar with various aspects of the Victor project and its environmental assessment; community members who have extensive experience on the land or their role in the community is relevant to issues regarding the mine proposal; and Elders as the primary holders of Traditional Knowledge (See Appendix A). The interviews followed a semi-structured format to allow those interviewed to express what they see as important in the detail they deem necessary, while keeping the questions focused on the thesis topic. Former Frost

Centre students Norbert Witt and Attawapiskat First Nation member Jackie Hookimaw-Witt, applied this method in the Attawapiskat community in a previous study and advocate its use (2003). They argue that this method "makes the interview appear more like a conversation, a culturally appropriate research tool" (Witt and Hookimaw-Witt, 2002: 378). In her MA Thesis (1998) exploring Attawapiskat Elder's interpretations of Treaty 9, Hookimaw-Witt devotes considerable time to questioning the proper way to form discussions with Elders in her community. Some methods, such as engaging in discussions while practicing traditional pursuits, would likely have provided greater insight into what Traditional Knowledge means to people from Attawapiskat. However, given the short timeframe to conduct research and my position as an outsider, this was neither feasible nor appropriate at the time. As this research is focused on Attawapiskat First Nations' experience with the environmental assessment process, documenting Traditional Knowledge is not one of its aims. Thus, the interview protocol allowed for participants to discuss what they deemed appropriate in their language of choice in the least intrusive manner possible. This was in part because the Victor Project has resulted in numerous studies being conducted in the community. Therefore community members have become very familiar with the research interview process; however, they may have also become weary of researchers placing demands on their time.

While only notes were taken when interviewing band council members and First Nations staff, the interviews with other community members, including Elders, were digitally recorded as well. Community members who are not part of the Attawapiskat First Nations band council are likely to be less represented in public registry documents; therefore interviews were recorded to ensure sufficient depth of material on a wide

variety of issues. As mentioned above, the interviews were conducted in the language of choice of the participant. While younger members employed English, most of the Elders spoke in Cree. Translation was provided by Gerald Matinas, who also provided assistance approaching people to participate and in setting up interview times and locations. Gerald has extensive experience providing translation services, including at community meetings and with the Traditional Knowledge Study conducted for the Victor environmental assessment. He was invaluable in enabling me to conduct interviews, and he provided much insight into community meetings and research in the community related to the Victor Project. Gerald's experience meant he was well aware of the terrain I was attempting to cover with my questions, and was adept at addressing the difficulties of translating concepts that stem from my academic experience into Cree and vice versa. He was also a reassuring presence for both the interviewees and myself. He ensured participants were comfortable with the interview process, and that my questions and intentions were understood.

The research in Attawapiskat occurred over the course of two field trips. The first in August of 2006 was largely to introduce myself to the community, inquire about potential interviewees and the proper protocols for conducting interviews, and to discuss my research with First Nations officials. This first trip was essential for gaining a local perspective on the challenges Attawapiskat faces, both with regards to the Victor development and otherwise, by spending some time in the community and through many formal and informal conversations. The second field trip occurred in October of 2006, and it was at this time that most of the formal interviewing took place. Community members who agreed to be interviewed, and were not doing so as a function of their

employment, were paid an honorarium. This was required by Attawapiskat First Nation for approval to conduct research on the reserve. As I considered my interviews to be soliciting "expert opinion" on the subject of Traditional Knowledge, participants needed to be compensated for their contributions. There were no specific protocols required or recommended by the Chief and Council, which would need to be followed when approaching community members beyond the payment of an honorarium. Gerald Mattinas indicated in our discussions prior to conducting interviews that I needed to be respectful and to allow Elders to speak without continuous interruptions. This would allow Elders to fully express themselves by not limiting their discussion or disrupting their thoughts.

In total ten interviews were recorded with Gerald Mattinas providing translation for six. Ethical consent forms were either read by the participants or translated by Gerald, and provided for a review of the transcripts if desired. The interviews were conducted at the Parish Hall of the Catholic Church or at places of residence, depending on the preference of the participants, with most lasting between one and two hours. While a schedule of questions was followed (see Appendix B), interviews frequently diverged from it. This was necessary in order to allow participants to discuss what they felt were important aspects in need of discussion, and to address specific issues that were raised in the interviews. In addition, a further eight interviews were conducted with a variety of First Nations, federal, academic and business representatives. These interviews took place both in Attawapiskat and at outside institutions over the entire course of this research. The interviews are not intended to give definitive statements that can be attributed to the entire community. They provide insight into people's experience with

the Victor Project and its environmental assessment. Qualitative analysis does not simply solicit "for or against" opinions, but rather investigates the complexity of perceptions.

Analysis

The overriding strategy in analyzing materials was to identify major issues in the environmental assessment and follow how these issues evolved through the process. Thus it involved both the categorization of key issues, while keeping the development of these issues in context. Joseph Maxwell discusses categorizing and contextualizing as two primary strategies for analyzing qualitative data (1996). While categorizing fractures the data in order to facilitate comparisons within and between categories that aid in developing theoretical concepts, contextualizing strategies "look for relationships that connect statements and events within a context into a coherent whole" (Maxwell, 1996: 79). Environmental assessments are conducted by breaking down what it aims to study into discrete categories. By comparison, Traditional Knowledge is characterized as holistic and is grounded in a particular context. Therefore, the tension and interplay between these two strategies is reflected in the Victor environmental assessment, and as such, both strategies are employed in the analysis. As Maxwell notes, "the two strategies need one another to provide a well-rounded account" (1996: 79). The major fracture investigated in this research project was the differing perceptions and goals of De Beers, the federal government, and Attawapiskat First Nation. What 'community participation' and 'incorporating Traditional Knowledge' meant to each group was a source of conflict

to be examined. However, it is how these competing interests interrelate in the contemporary context under investigation, and in the historical context of the colonization of Indigenous peoples and their lands, that is most significant. The interests that dominated the Victor environmental assessment was a reflection of the power of the participants, and therefore provides insight into colonial processes that continue to impact on Indigenous peoples today. Although categorization is a common and effective research strategy, the role it has played in marginalizing Indigenous peoples must also be recognized. Thus, while categorization is employed in the analysis, it is also a subject to be examined, particularly as it is prevalent in the environmental assessment process. In order to avoid conducting research that denies community members their own voice, comments made in interviews are credited to the speakers. As the community members of Attawapiskat are the authority on their Traditional Knowledge and their experience with the Victor Project, they need to be accredited for their observations and conclusions. Further, through the conduct of my research I am in no way, nor did I attempt to be, an expert on Traditional Knowledge of the Attawapiskat Cree. Only the Elders in the community can fulfill that role. My task was to evaluate the environmental assessment process as it relates to Indigenous communities, and attempt to understand the concerns of Attawapiskat first Nation's members. I have also attempted to discuss issues in broad themes, rather than in discrete categories, so that their context remains visible. Grounding my analysis in the larger context of colonization will provide the wide perspective necessary to investigate the implications and meaning of the Victor Project for the people of Attawapiskat.

Limitations

While I believe my investigation is adequate and appropriate for answering my research questions, there are several limitations. The documents, for example, are the public manifestation of much private negotiation. Although the public registry is extensive, it is only a partial display of the political environment within which the Victor environmental assessment was conducted. It cannot, for example, demonstrate political manoeuvring behind the scenes where those with greater political power can operate more freely. Private discussions are not subject to public scrutiny, and as such, many of the documents posted on the public registry read more as statements without necessarily demonstrating how statements were arrived at. While at times it is clear how decisions were arrived at, at other times it can only be inferred why decisions were made. Often it is within these gaps where the primary concerns of this research are located. Therefore interpretations often must be interpreted from partial information. While the interview process in Attawapiskat gives some insight into the gaps in the documentation, it too provides only a partial account.

The interview process presents several dilemmas. Those who agreed to participate are at least to some degree comfortable working with researchers from outside the community. They may therefore be more receptive to the requirements of the environmental assessment process and research procedures. However, those who are not comfortable with academic research, but are very knowledgeable of the land and Cree traditions, may be unrepresented in this research project and in the environmental assessment as well. They too are likely to have significant statements and observations

on Traditional Knowledge and the Victor mine development. While recognizing the depth and importance of statements made by the participants, it must be acknowledged that the small number of interviews conducted for this study represents a partial view. While attempts were made to interview a diverse group of people, there are several groups that are not represented or are underrepresented in addition to the group discussed above. As the focus of the research is on Traditional Knowledge, the participants are those who are assumed to have an understanding of its meaning and implications in regards to the Victor project. This is why Elders and adult members of the community were interviewed, and not children and young adults who nonetheless may have provided important insights into this discussion. In addition, while three of the four Band Council representatives interviewed were women, only two of the ten community members interviewed not connected to the Band Council were women. While efforts were made to create a better balance between men and women, it was more difficult to get women to agree to interviews. This may be a result of past research practices in the community that have favoured male participation, thus making men more familiar and more likely to engage in research studies. It may also be that men assume the role of spokesperson for the community; however, the large representation of women on the band council does not suggest this. In one instance, a woman who had agreed to be interviewed later declined because she was "too busy" with household chores at the time the interview was to be conducted. If the time constraints of this limited study made it difficult for women to participate, this has great implications for the environmental assessment under examination. The assessment process was very demanding of people's time, and the ability to give that time determined, in part, who participated.

As Attawapiskat is most directly affected, other First Nation communities in the region were not contacted in this study. While the input of other communities may have been beneficial, the time and resources that would be necessary were beyond the scope of this study. This may be perceived as furthering a major complaint from other communities in the region that they were not sufficiently consulted during the Victor environmental assessment process. Arguments from members of other regional communities would have been helpful to demonstrate the value of greater consultation and what their Traditional Knowledge could contribute to the assessment.

Despite the limitations, the collection and analysis of the documents and interviews discussed provides more than sufficient material through which to examine the incorporation of Traditional Knowledge into the Victor environmental assessment process. Statements from Attawapiskat Chief and Council and minutes from consultation meetings held in First Nations communities provide much evidence on how the environmental assessment process was serving the interests of First Nations. The interviews in the community of Attawapiskat provide an opportunity for an overview of the people's experience with the Victor Project. From the collected and analyzed materials, conclusions can be drawn as to the effectiveness of incorporating Traditional Knowledge in the Victor environmental assessment, and whether this process was seen as beneficial for the First Nation community of Attawapiskat.

4. The Victor Diamond Project Comprehensive Study

An environmental assessment can be a long, complex, and highly political process, as was the case with the Victor Diamond Project. A federal environmental assessment was required for the proposed Victor Project in order to gain necessary federal and provincial work permits and licences for construction and operation of the mine. As this project poses significant impacts on the environment, and is of great concern to the Aboriginal communities in the region, the type of environmental assessment mandated was a comprehensive study. This would involve provincial counterparts in environmental assessment consultations; however, there are additional environmental assessment requirements of the Ontario government for activities off the main mine site. The following chapter will discuss the three main stages of the Victor Diamond Project comprehensive study environmental assessment. First will be an examination of consultations with First Nations leading up to the establishment of the assessment guidelines. Second will be an investigation of the comprehensive study process and how major issues raised by First Nations were addressed. The third stage is the release of the Comprehensive Study Report and the final public review period.

A defining and problematic feature of a comprehensive study is that it is the proponent who conducts the environmental assessment, although in consultation with other parties. These three stages of the assessment are intended to give ample input from various community and government bodies concerned with the development proposal. In this manner issues and concerns are addressed and project design is improved to lessen

the impact on the environment. As it is the proponent who largely structures the environmental assessment and orchestrates its conclusions, communities have many obstacles to overcome to participate effectively and to ensure projects are beneficial.

The Victor Project Proposal and Establishment of the EA Guidelines

De Beers first began diamond exploration activities in the James Bay Lowlands during the 1980s. Prospectors had previously searched for diamonds in the many rivers of the Lowlands region as early as 1962, uncovering a single small diamond in 1963 (De Beers *CSEA*, 2004). Further investigations of stream sediments proved unsuccessful and the search was discontinued (De Beers *CSEA*, 2004). Improved exploration techniques, such as aerial surveying, and a greater understanding of geologic processes involved in the creation of diamonds, led mineral exploration companies back to the James Bay Lowlands in the 1980s. By 2000 De Beers had located over twenty kimberlite pipes that contained diamonds, with the Victor Deposit on the south shore of the Attawapiskat River showing particular promise.

The Victor deposit consists of two separate kimberlite pipes that converge at the surface, covering an area of about 16 hectares (Cranstone, 2001). More advanced exploration and feasibility studies confirmed the viability of the Victor site. The initial proposal for the Victor project included numerous on-site and off-site activities. The remote location with virtually no infrastructure in place to support a large mining operation poses many significant challenges. Mining the Victor kimberlite itself will

require an open pit reaching depths of about 233 meters and spanning approximately one kilometre across. In total, over 28 million tonnes of kimberlite will be mined and processed, in addition to the overburden and muskeg covering the Victor deposit. Major on-site features, in addition to the open pit, include: an ore processing facility; numerous structures for warehousing, servicing operations, and worker accommodations; stockpiles of overburden, mine rock and processed ore; a waste management facility; fuel storage and power facilities; pipelines for pit drainage and discharge into the Attawapiskat River; limestone quarries, sand and gravel pits to supply aggregate materials for construction; and all-weather access roads and an airstrip (De Beers *CSEA*, 2004). In order for vehicles to access the Victor site, winter roads are needed that can handle heavy transport, and the original proposal called for the shipping of large amounts of fuel through Hudson and James Bay (De Beers *CSEA*, 2004). The fuel would then be transported inland from Attawapiskat to the Victor site by a pipeline from James Bay. This proposal was eventually dropped in favour of a hydro corridor, to be discussed in greater detail later in this chapter. Facilities would have to be built in Attawapiskat to handle shipment and storage of fuel and other materials, and dredging would be necessary in James Bay and at the barge landing in Attawapiskat to handle the larger vessels. In addition, a training centre would be built in Attawapiskat so community members would be able to qualify for some of the jobs the mine would offer.

The Victor mine is expected to be in production for 12 years, with a total project life of 17 years including construction and closure stages (De Beers *Factsheet*, 2006). During the construction phase about 600 people will be employed, and about 400 people will be employed during production. Reclamation will only employ a few people at

intermittent times, and De Beers intends to begin reclamation in parts of the Victor site while the mine is still in operation.

In May of 2002, De Beers initiated approval procedures to begin mining operations. They submitted their proposal to the Department of Fisheries and Oceans who assumed they would be the lead authority in the conduct of the environmental assessment (Canada, 2004). De Beers and Attawapiskat First Nation had signed a Memorandum of Understanding (MOU) in 1999 that allowed for De Beers to continue their exploration activities with the support of the First Nation community. This was suspended by Attawapiskat First Nation in July of 2002 with the request that "no environmental assessment process commence with respect to the project", as the First Nation was "not yet prepared for this and there is much to review from our standpoint" (Public Registry #114). Attawapiskat First Nation also stated their preference for the Department of Indian and Northern Affairs to be the lead agency should a federal environmental assessment take place, as they would be most familiar with the issues facing the community. Attawapiskat's Acting Chief at the time, Thomas Tookate, claimed in his letter to the Minister of Fisheries and Oceans Canada that the previous Chief had signed the MOU without prior Band Council and community approval, and was concerned how the project might affect their Aboriginal and treaty rights. Tookate stated in his letter:

> To date we have had no real or meaningful dialogue, let alone consultation, with your Ministry about our aboriginal and treaty rights as it relates to the Project. This is the case for our dialogue with De Beers and other affected or interested Ministries as well (Public Registry #114).

The cancellation of the MOU attracted the attention of both De Beers and government officials, and signalled Attawapiskat First Nation's intention to play a significant role in decisions regarding the Victor Project.

By October of 2002 Attawapiskat First Nation and De Beers had reached an agreement that would allow De Beers to continue its winter work program and feasibility studies for the Victor site (Canada, 2004). As part of this agreement, negotiations began on an Impact Benefit Agreement (IBA) that would compensate Attawapiskat First Nation for impacts of the mine, and provide economic opportunities and money for training to the First Nation. In the spring of 2003 De Beers submitted a preliminary draft environmental assessment report to federal and provincial agencies prior to any decisions being made on what the guidelines for the assessment would be.

While Attawapiskat's preference for lead responsible authority (RA) was the Department of Indian and Northern Affairs, that task eventually fell to Natural Resources Canada (NRCan). On September 19, 2003 NRCan assumed the lead role in a letter to De Beers, which officially started the environmental assessment process and work began on establishment of the guidelines under which the assessment would be conducted (Canada, 2004). This was likely preferable to De Beers as NRCan's central mandate is to promote resource development. Thus while Attawapiskat wanted a lead RA that would understand their issues best, the lead RA instead was one that could be perceived as aligned with the interests of De Beers. Beginning the process at this time allowed De Beers to conduct the assessment under the 1992 CEAA as the 2003 amendments would not come into force until October 30, 2003 (Canada, 2004). Therefore mandatory public participation and accompanying funding measures in the revised CEAA did not apply.

However, Aboriginal rights entrenched in the *Constitution Act* (1982) and legal precedents require meaningful consultations for development projects in traditional Indigenous territories regardless of the letter of the CEAA.

First Round of Consultations

Decisions on the scope of the environmental assessment for the Victor Project were withheld following consultations with Mushkegowuk communities. In clearing the way for the creation of the guidelines, the federal and provincial authorities consulted with each other in an October 6, 2003 meeting on the legal framework for conducting the environmental assessment and issuing permits to De Beers. De Beers, as part of their agreement with Attawapiskat First Nation, agreed not to apply for any approvals or work permits until the IBA was finalized. It was believed by the authorities participating in the October 6, 2003 meeting that as long as the IBA negotiations were successful the concerns of Attawapiskat would be placated (Public Registry #36). However, all Muskegowuk communities needed to be consulted about the proposed project. Some insight into the nature of the consultation process is evident in how government officials planned to undertake upcoming meetings in Attawapiskat. It was suggested that while Chief and Council understood the technical information, the larger community did not (Public Registry #36). As such, the presentation needed to be kept simple. Pictures and transcribed point summaries were to be employed so the community could understand the presentation and language barriers could be overcome (Public Registry #36).

Federal government representatives traveled to the communities of Attawapiskat, Kashechewan, Fort Albany and Moose Factory in the fall of 2003 to meet with the Chief and Councils, and hold general community meetings. While the meeting summaries posted on the public registry are very limited in their content[2], several concerns of the First Nation's communities do come to light. The perception that the environmental assessment was occurring after the fact, and that De Beers' advanced exploration activities constituted mining, was voiced in several meetings. De Beers had already undertaken numerous studies and circulated its draft environmental assessment, leading some to conclude the assessment had for the most part been completed. Government representatives stated that De Beers would have to rewrite their report once the guidelines were established, and they may have to conduct additional studies to meet those guidelines. They dismissed the argument that De Beers' advanced exploration amounted to mining operations as a perception based on community members' unfamiliarity with exploration processes. However, this view ignored how significant the intrusion of advanced exploration was for the Mushkegowuk region. Indeed, many people voiced their concern that exploration activities themselves were already having a significant impact on the environment.

Much scepticism of the environmental assessment process was evident in the community and Chief and Council meetings. Many felt the mine was essentially a "done deal", and doubted it could be stopped even if major impacts were found. Federal government representatives did little to suggest this perception was false, stating in a meeting with the Moose Cree Chief and Council that they "only had a limited role in this

[2] Meetings that were two to three hours in length are reduced to 2-3 pages summarizing key points.

project" (Public Registry #42) related to federal permits and licences. They indicated "De Beers could proceed with other components of the project without federal approval if they wanted to, assuming that they receive provincial approval where required" (Public Registry #42). The deferral to provincial jurisdiction led to the question in many meetings as to why provincial representatives were not involved in the meetings. As natural resources were under provincial jurisdiction, it was unclear as to whether federal officials at the meetings had the authority to make decisions regarding Victor.

The issue of treaty rights and land claims repeatedly was raised as important to the Mushkegowuk Cree communities. However, federal representatives refused to discuss land claims on the grounds that it is not part of the environmental assessment process. Therefore, even when meeting minutes note significant discussion on the issue, there is little indication of what specific points First Nations people raised (Public Registry #37; #40; #44). Had the issue of how the Mushkegowuk communities' Aboriginal and treaty rights applied to the Victor proposal been clarified at the start, the concern that the Province of Ontario could possibly override any concessions granted to First Nations might have been addressed. Instead, conflicting government jurisdictions and responsibilities were perceived as convenient buck passing tools. In addition, statements by De Beers conflicted what federal authorities were saying about the environmental assessment process, creating "a lot of confusion on the part of the First Nations on what is going on with this project" (Public Registry #42).

The information provided to First Nations was also criticized as inadequate. At times the communities were unaware of changes to the project before being informed in the meetings. In particular, the Chief and Council of Kashechewan did not know of plans

to ship fuel through Hudson Bay and dredge in James Bay to accommodate large tanker vessels (Public Registry #41). This forced council members to respond on the spot to the fuel shipment proposal, indicating "serious misgivings" (Public registry #41) about what could happen in the event of a spill. Scepticism that the government or De Beers would rectify any problems that might arise in fuel shipment plans or in mining operations was based on past experiences in the region. Fort Albany Chief and Council cited PCB contamination from abandoned radar stations, and a diesel fuel spill in Attawapiskat that has left the school closed since 1999, as two reasons for their lack of confidence (Public Registry #40). The meeting minutes state "based on past performance, there is no reason to think there will be follow up on the mine in 20 years from now" (Public Registry #40). The lack of trust in governments and industry appears in part to be behind First Nations' demands that their communities be involved in monitoring programs. This request was put forth in both band council and community meetings. Worry was expressed in all the meetings as to what the impacts would be on wildlife, particularly species that are harvested in the region, and what the effect would be on traditional activities. The possibility of water contamination created anxiety in the communities, and federal authorities admitted they were unsure what effect the proposal to draw water from the Nayshkootayow River would have (Public Registry #37).

De Beers' study of Traditional Knowledge thus far did little to address the concerns of First Nations, and its quality was a particular point of contention. Attawapiskat band council noted resistance from Elders to participate with De Beers, and stated that a "better method is required" (Public Registry #37) for how the environmental baseline study was conducted. Government officials responded that they "cannot tell De

Beers which methods to use, only assess the output of the method" (Public registry #37). However, it was indicated that Attawapiskat would have the ability to identify inadequacies of the TEK study (Public Registry #37). Federal authorities could then identify these as deficiencies in the assessment (Public Registry #37), although it is not clear how the deficiencies would be addressed.

Other First Nations communities in the region were upset that only Traditional Knowledge from Attawapiskat was considered in De Beers' plans (Public Registry #40). Impacts from such things as fuel operations, particularly in the event of a major spill, and on game animals that travel great distances and are hunted by all communities, affect the entire region. Therefore, the other Mushkegowuk communities argued their Traditional Knowledge was imperative to the environmental assessment. Community meetings in advance of the environmental assessment guidelines demonstrate tensions between Attawapiskat and other Mushkegowuk First Nations. Attawapiskat First Nation is accused of not communicating with other First Nations in the Fort Albany Chief and Council meeting, and there is concern that only Attawapiskat is involved in an impact benefit agreement with De Beers (Public Registry #40; #43). The confidentiality of the impact benefit agreement under negotiation between De Beers and Attawapiskat has led to scepticism that the concerns of other First Nations will be addressed, and worry that they will not receive any benefits from the project. The traditional territories and trapping grounds of both Fort Albany and Kashechewan border with Attawapiskat south of the mine site, leading them to believe they should be more directly involved in negotiations and consultations concerning Victor. In the minutes from the Fort Albany Community Meeting it was stated "there is now anger between FN communities" (Public

Registry #44). Further, it was stated that this constituted an "impact on culture" as "tradition would have been to share the benefits" (Public Registry #44).

Many of the issues raised by first Nations appeared to be dismissed by the federal authorities as arising from their ignorance of mining operations and environmental assessment procedures. An attempt was made to further educate First Nations representatives after the first round of public consultation, as Environment Canada hosted a day and a half workshop in Timmins in March of 2004 on the potential effects of diamond mining. The event prompted Attawapiskat First Nation to suggest it was the federal government that perhaps needed to be educated, stating:

> It became evident to all who participated at the public meetings in Attawapiskat and at the Timmins Diamond Mining Seminar that the Federal Regulators appear to have limited knowledge and understanding of our traditional ways and the importance of continuous dialogue with us to resolve issues (Letter from Attawapiskat Chief and council to CEAA, March 29, 2004: Public Registry #158).

The Chief and Council criticized "the current process of flying in and out in a 4 hour period" as "not effective nor meaningful consultation or participation" (Public Registry #158). Meaningful consultation with Attawapiskat First Nation was necessary, as government officials "do not have an understanding of the impact that this resource development will have on our traditional way of life" (Public Registry #158). Therefore, in order for federal regulators to better understand traditional ways of life, Attawapiskat First Nation invited regulators to participate in the annual spring hunt on Akamaski Island (Public Registry #158). This would have constituted a great opportunity for government officials to become more knowledgeable and sensitive to the issues facing the Attawapiskat Cree. While representatives from the Department of Fisheries and

Oceans and the Department of Indian and Northern Affairs accepted the invitation, Natural Resources Canada and the Canadian Environmental Assessment Agency declined.

The federal government representatives appeared to portray their role in First Nations consultation as little more than a liaison between the communities and De Beers, with the responsibility of 'educating' those affected by the project. They downplayed their authority in the process, and jurisdictional issues were clouded by not having the Province of Ontario participate. Environmental assessment is presented as a technical exercise with little room for negotiation. It is little wonder First Nations had little faith that their concerns would be addressed. As communities were already experiencing impacts from the Victor Project and most considered approval of full operations a foregone conclusion, the assessment process was failing First Nations before it even began. The issue of Traditional Knowledge was also proving divisive in how it was approached by De Beers. Regional First Nations were not included in The Traditional Knowledge Study, and Attawapiskat's experience participating with De Beers was less than satisfactory. The attempt by Attawapiskat First Nation to engage with federal officials on the issue of Traditional Knowledge was largely rebuked, as the lead RA and the Canadian Environmental Assessment Agency declined the invitation to participate in the spring goose hunt.

Perhaps the most significant indication that the environmental assessment process would not meet the needs of local First Nations was the refusal of the federal government to discuss Aboriginal and Treaty rights. While treaty issues may not specifically be a part of the environmental assessment process, it needs to be resolved to the satisfaction of the

affected First Nations before significant development proposals should be entertained. By circumventing treaty issues, the authority and rights of the Mushkegowuk First Nations were not explicitly recognised. As the issuing of federal and provincial permits for the Victor Project will be based on the environmental assessment, it is imperative for treaty issues and land claims to be settled before development takes place. This is largely what the major recommendation of the Berger Inquiry into the Mackenzie Valley Pipeline constituted. Although the Mackenzie Valley at the time did not have any treaties in place, as Treaty 9 is in the case of Victor, the issue still remains that for effective participation and protection of Aboriginal interests, ongoing treaty issues need to be resolved to a level that satisfies First Nations in determining their rights and authority over development decisions.

Guidelines for the Victor Comprehensive Study

Shortly following the round of meetings with Mushkegowuk First Nations communities, the federal government in December of 2003 released detailed draft guidelines for the Victor Project environmental assessment. Following comments by First Nations, federal and provincial government authorities, and De Beers, the draft guidelines were revised and the final version was released on February 26, 2004. The final *Guidelines* (2004) mandated a comprehensive level environmental assessment for the Victor Project. The assessment was to follow an "ecosystem approach" and to be "consistent with the Government of Canada's sustainable development and precautionary

approach principles" (Canada, 2004: 8). The final guidelines indicate the federal government and De Beers will develop a participation plan to ensure First Nations and the wider public are involved in consultations. The First Nations and councils of Attawapiskat, Fort Albany, Kashechewan, Moose Cree, and the Mocreebec Council were to be included in discussions regarding the Victor assessment, as were the Mushkegowuk Council and the Nishnawbe Aski Nation. Any meetings with Aboriginal communities were required to have a translator, and De Beers was required to meet when requested to address any specific issue or concern. Once De Beers completed the comprehensive study, the guidelines stated a 60-day public comment period would follow. When the RAs concluded that the comprehensive study meet the guidelines, De Beers in cooperation with the RAs would finalize a Comprehensive Study Report (CSR) and submit it to the Canadian Environmental Assessment Agency (CEAA). There would be another public comment period to be determined by the CEAA following the release of the CSR before the Minister of the Environment made a final decision. Once the Minister approved the CSR, De Beers could seek approval for any licences or permits it needed for construction and operation of the Victor mine. This was contingent on provincial acceptance of the conclusions reached in the CSR, and that De Beers fulfilled any other provincial environmental assessment requirements.

Central to the Victor environmental assessment was the inclusion of Traditional Knowledge as a key source of information. The guidelines direct De Beers to "make all reasonable effort to collect and/or facilitate the collection of traditional/community knowledge relative to the proposed project" (Canada, 2004: 12). Further,

> All traditional/community knowledge collection methods, data, and interpretations of that data must be collected and carried out in collaboration with and with the concurrence of Aboriginal communities and organizations. For reasons of confidentiality, De Beers shall only incorporate into the EA report those portions of traditional/community knowledge that have met the express consent for release by the Aboriginal communities and organizations involved (Canada, 2004: 12).

This meant Aboriginal communities had some control over the collection and dissemination of knowledge held by their communities; however, De Beers oversaw the collection of Traditional and Community Knowledge, and determined how it would be employed in the environmental assessment. The federal government stated:

> (they) will seek input from the First Nations communities with respect to this information, and any conclusions or statements in the comprehensive study that are based on this knowledge will be discussed with the First Nations communities to ascertain its validity (Canada, 2004: 12-13).

Therefore, while the draft guidelines did not make clear that Traditional Knowledge was the intellectual property of the communities from which it originated, the final guidelines did. The guidelines also make clear that Traditional Knowledge is to be considered in all aspects of the Project, including "project planning, design, management, mitigation, monitoring, and decommissioning" (Canada, 2004: 12).

A significant requirement of the draft guidelines was the examination of socio-economic effects (section 8.13). They stated: "De Beers shall assess the effects of the proposed project on the cultural well being of the affected communities" (2003: 25). Socio-economic effects were not limited to those that could be directly related to biophysical impacts. The draft directed the assessment to consider effects such as "anticipated or possible changes on social cohesiveness or language use" (2003: 25), in

addition to numerous other points largely related to changing economic conditions. De Beers' response regarding socio-economic factors questioned only the provision of information on federal and provincial revenues and costs, and the effect on national and provincial Gross Domestic Product (Public Registry #50: 6). While the draft guidelines did not specify that a gender analysis was required, it was a stipulation in the final guidelines. This came in part from a request by Attawapiskat First Nation to examine how the project might differently affect "identifiable groups, including women, youth and elders" (Public Registry #120).

The final guidelines appeared to set criteria for the comprehensive study that would significantly incorporate Traditional Knowledge, broadly examine socio-economic impacts, and involve First Nations communities at the local and regional level. All parties involved, including De Beers, accepted the terms, and First Nations' participation was contingent on the assurance that the guidelines would be honoured. These terms would allow for a considerable amount of input from First Nations peoples and allow communities to properly prepare for the changes mining development would bring.

The Comprehensive Study Process

After little more than a week of issuing the final guidelines for the Victor environmental assessment, De Beers released its *Comprehensive Study* (2004). The document detailed all the anticipated components, the major phases of the project, and considered alternative means for carrying out the project. The comprehensive study also

provided a description of the environment in the study area, predicted environmental effects, and mitigation measures to minimize harmful effects of the project. In addition, numerous technical documents detailing studies conducted for the project and its environmental assessment were released along with the *Comprehensive Study*, with the major exception having been the Traditional Knowledge Study. The nature of the Traditional Knowledge Study posed several difficulties for the speedy commencement of the public review period desired by De Beers. As this study was not yet complete, and issues of confidentiality needed to be resolved, Attawapiskat First Nation made a request to the CEAA that the review period for the comprehensive study not begin until the Traditional Knowledge Study was complete. While Attawapiskat First Nation was asking for more time, the pressure De Beers was placing on the First Nation is evident in a letter from De Beer's Vice President John Fowler, to Attawapiskat's Chief Negotiator Edmund Gus. The letter requested:

> That the AttFN would not delay the CSEA process by demands for extended review periods unless it has really strong reasons to do so. If there are further delays, the project schedule will slip by a year. This would be unfortunate for several reasons. First, there would be few if any jobs available during the period of the delay, thus affecting the First Nation members as no work can be carried out without permits. Secondly, I am advised that De Beers has other projects in progress that are advancing right behind Victor. These other projects have better rates of return, and there is a very real risk that if the Victor project is delayed, it may be overtaken by one or more of these projects, and this could then lead to a further delay of several years before the project would move ahead (Letter from John Fowler to Edmund Gus, April 6, 2004: Public Registry # 174).

Pressure from De Beers for Attawapiskat First Nation to proceed quickly through the environmental assessment was a constant element of the process. The Chief of

Attawapiskat First Nation at the time, Theresa Hall, noted that De Beers was always pressuring the community to sign off on various aspects of the assessment, threatening to pull out or ignore the community if they did not agree to their terms (interview Aug. 29, 2006). In addition, the community faced enormous difficulties understanding what was involved in diamond mining and its implications to even know what to question and how to respond. As such, Attawapiskat needed to rely heavily on consultants from outside the community in order to participate in the environmental assessment process. Funding was needed in order for Attawapiskat to hire consultants before the review period could begin. The Mushkegowuk Council also required funding as they were to focus on regional issues. De Beers initially provided Attawapiskat with $100,000 of funding to review the Comprehensive Study, and the federal government provided $130,000 to meet the $230,000 requested by Attawapiskat (Public Registry # 174). The Participation Plan for First Nations and other stakeholders needed time to be finalized as it had only been issued in draft form on April 2, 2004 (Public Registry # 165). The federal government agreed to Attawapiskat First Nation's request for a slight delay in beginning the public review period until the Traditional Knowledge Study was complete, the participation plan could be agreed upon, and funding for Attawapiskat and the Mushkegowuk Council could be in place. The CEAA subsequently gave a start date for the formal public review of April 16, 2004, which would conclude on June 15, 2004 (Public Registry #181, 182). On April 14, 2004, Attawapiskat Chief and Council gave De Beers permission to release the Traditional Knowledge Study to the CEAA, and indicated they were satisfied that the formal review period could begin (Public Registry # 184).

De Beers' Power Supply Plans

During the formal review period, several major issues came to light that resulted in extensions of the review period into the fall of 2004, well beyond the 60 day period. De Beers had complained to federal officials that even the 60 day period was excessive, arguing for only a 30-45 day review period (Public Registry # 79). However, the objections from many Aboriginal communities and organizations to De Beers' proposal to transport fuel through Hudson and James Bay resulted in major changes to the project. The plan detailed in the *Comprehensive Study* called for the shipment of approximately 45 million litres of fuel per year by ocean tanker, requiring four to five shipments a year. The tankers would need to off-load onto smaller barges southwest of Akimiski Island as the shallow conditions near the James Bay coast prevent a closer approach. The barges would dock at Attawapiskat where the fuel would be stored at a fuel tank farm, and pumped approximately 110 kilometres to the Victor site through a pipeline. The fuel would power diesel generators to provide electricity at the mine site. That there would be problems with De Beers' plan to ship fuel by ocean tanker should not have come as a surprise. The first round of consultation meetings conducted by the federal government revealed much criticism of the proposal, and significant opposition was voiced at almost every meeting. At the meeting with Kashechewan Chief and Council and federal officials on October 22, 2003, it was the first time they heard of the proposal to ship fuel through Hudson Bay. They were immediately uneasy about the potential for spills and the impacts of dredging in James Bay, and how this could affect animals that the people of Kashechewan depend on (Public Registry #41). The Moose Cree Chief and Council

were very concerned about fuel shipments, whether by ocean tanker or by transport along the coastal winter road as first proposed by De Beers, as spills resulting from either method would have a devastating impact on the environment and traditional land use (Public Registry # 42). At the Fort Albany meeting, the issue of increased traffic on James Bay was raised, in particular the use of lights and how it may effect migratory birds (Public Registry # 40).

Following release of the *Comprehensive Study*, the Mushkegowuk Council commented that De Beers could not "assess the consequential effects if malfunctions and accidents were to occur during fuel transport and during fuel lightering[3] in the Bay", as this "requires an understanding of the natural environment and the use of that environment" (Letter, April 27, 2004: Public Registry # 196). The primary deficiency in De Beers' environmental assessment identified by the Mushkegowuk Council was that Kashechewan, Fort Albany, and the Moose Cree were not included in the Traditional Knowledge Study (Public Registry #196). Therefore, De Beers did not have adequate understanding of the James Bay environment and the adjacent coastal lands (Public Registry #196). The letter from Mushkegowuk Lands and Resources Director, Job Mollins Koene, stated, "Traditional Knowledge is very relevant to assessing the consequential effects of a major fuel spill in James Bay", and the Traditional Knowledge gathered by de Beers represents a "serious deficiency" in the environmental assessment (Letter, April 27, 2004: Public Registry # 196). De Beers' response, through the consulting firm AMEC conducting the environmental assessment, stated:

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[3] Lightering is the technical term for offloading fuel from large tankers moored in deep water onto smaller vessels that can navigate in shallow waters.

> TEK data from the AttFN are sufficient to our understanding of lightering operations, and carrying out additional TEK studies with other coastal communities would be unlikely to help with project decisions, and is not therefore warranted in this particular instance (Letter from David Simms, Head of Environmental Impact Assessment and Resource Development, AMEC, to Job Mollins Koene, Mushkegowuk Lands and Resources Director: Public Registry #204).

De Beers and AMEC justified this by stating the data they had collected, along with Traditional Knowledge of Attawapiskat First Nation and pre-existing data on the James Bay coastal environment was enough to assess environmental impacts from lightering operations (Public Registry #204). Further, they argued, "the primary sensitivity of this environment to the VDP (Victor Diamond Project) is the potential for fuel spills", and this risk is characterized as "extremely low" (Public Registry #204). Therefore, De Beers and AMEC concluded:

> No amount of investigation will change this fact, and we believe we have been able to collect sufficient data from existing sources, and from the AttFN to characterize the area relative to potential Project impacts and risks. Efforts in this regard are more appropriately placed in preventing spills, and in developing response plans (Letter from David Simms, Head of Environmental Impact Assessment and Resource Development, AMEC, to Job Mollins Koene, Mushkegowuk Lands and Resources Director: Public Registry #204).

First Nations were not the only ones claiming De Beers' understanding of the James Bay environment was not sufficient. Environment Canada pointed to weaknesses in De Beers' study of waterfowl. In the environmental assessment, De Beers relied largely on one study published in 1993 that did not investigate areas most likely impacted by the project, and only examined summer and fall periods (Public Registry #207). Much of the first hand knowledge lay within the Traditional Knowledge Study; however,

Attawapiskat First Nation removed important information relating to coastal birds for confidentiality reasons (Public Registry # 207).

Pressure from Aboriginal communities forced De Beers to reconsider its plan to ship fuel through Hudson and James Bay, resulting in a major overhaul of the environmental assessment as several power supply and transportation routes were considered. In a meeting with federal and provincial authorities on June 24, 2004, De Beers identified four alternatives it was investigating to its original ocean tanker and pipeline fuel transport plan. The plans ranged from simply scrapping the pipeline concept in favour of trucking fuel along a winter road from Attawapiskat to the Victor site, to the construction of transmission lines from the south and potential winter road access to the site from Hearst (Public Registry # 237). Examination of these options would require De Beers to expand its environmental assessment, and complete a *Component TEK Study* (2004) for areas along the proposed routes. The addition to the original comprehensive study was published as *Re-Evaluation of Site Access and Power Supply Alternatives* on August 20, 2004. The four options had expanded to seven in the *Re-Evaluation*, and required a further public comment period. While the plan for tanker shipments of fuel received condemnation from all Mushkegowuk First Nations communities, the proposal for an upgraded and expanded hydro corridor gained a better reception.

De Beers' preferred option for site access and power supply stated in the *Re-Evaluation* was for power transmission lines to replace the need for large tanker shipments of fuel through Hudson and James Bay. This would require constructing a 115kV transmission line parallel to an already existing power transmission line from

Otter Rapids to Kashechewan, and along the winter road on the south shore of the Attawapiskat River from Attawapiskat First Nation to the Victor site. Transmission lines from Kashechewan to Attawapiskat were considered sufficient to handle the power needs. This plan would reduce fuel needs from 45 million litres a year to approximately 15 million litres a year. Thus, while ocean tanker shipments and the need for dredging in James Bay at the mouth of the Attawapiskat River would be averted by constructing power transmission lines, significant amounts of fuel would still need to be transported via winter roads to the Victor site. Overland access would be by existing coastal winter roads from the railhead in Moosonee to Attawapiskat, and the south shore winter road already in use from Attawapiskat to the Victor site. Both roads would need significant upgrades to handle the increased number and size of vehicles.

The change in De Beers' original fuel supply plans was given as evidence confirming the effectiveness of public consultation in the environmental assessment process. Mushkegowuk communities were able to raise concerns about a significant component of the project, and an alternative that was more favourable to local communities was agreed upon. Supplying Victor's energy needs by upgrading and expanding the existing power transmission corridor and constructing a new line from Attawapiskat to the Victor site offered tangible benefits to many regional First Nations communities. It provided employment for local peoples and improved the power infrastructure servicing Mushkegowuk First Nations communities. Natural Resources Canada's Senior Policy Advisor Lise-Aurore Lapalme remarks that the change in power supply was in particular a validation of Traditional Knowledge in environmental assessments (interview, August 10, 2006). Traditional Knowledge, both in formal studies

and in comments at public consultation meetings, gave evidence that the navigation of large vessels would be more of a challenge than first believed by the proponent and government officials. In the event of a major accident, currents in James Bay would cause the spill to spread all around the coast, making it very difficult to contain. That light would interfere with bird populations on Akimiski Island was also unknown to outside investigators, and local Aboriginal peoples indicated the presence of permafrost lenses along the proposed pipeline route that would create challenges for its construction.

However, De Beers did not readily accept the claims made by First Nations communities. They attempted to diminish the value Traditional Knowledge had in understanding the James Bay coastal environment by deferring to previous scientific studies, and they argued Traditional Knowledge did not play a role in spill prevention and the development of response plans. De Beers also demonstrated a predetermination of where Traditional Knowledge would be employed in the assessment, relegating it to the role of mere description. Traditional Knowledge of the James Bay coastal ecosystem underscored public opposition to the plan, and according to Lapalme, marks the first time such a major change in project design has resulted from Traditional Knowledge (interview, August 10, 2006). The change to transmission lines would require a greater capital investment by De Beers; however, it eliminated the potential for fuel spills during marine transport, provided greater infrastructure in the region, and gained the support of coastal First Nations, as well as the town councils of Moosonee and Cochrane (De Beers, *Re-Evaluation*, 2004). This was not, however, from De Beers' actions in integrating Traditional Knowledge in the environmental assessment. The change was due to the firm and united demands of regional First Nations.

Socio-Economic Impact Assessment

While the change in power supply is heralded as a major victory for Aboriginal communities, they were far less successful in demands that socio-economic impacts be part of the environmental assessment. In establishing the guidelines for the assessment, De Beers had not raised any objections to examining social and economic impacts; however, during the review period of the *Comprehensive Study* De Beers attempted to limit the scope of this examination. In a meeting with federal and provincial officials on July 22, 2004, De Beers' representative David Simms indicated their desire to examine only those socio-economic effects that could be directly attributed to biophysical impacts of the Victor Project (Public Registry #254).

De Beers' examination of socio-economic effect was the subject of heavy criticism before they announced their intention to limit its scope. The July 22, 2004 meeting between De Beers and government officials was to discuss "major deficiencies" on the themes of natural and cultural heritage, Traditional Ecological Knowledge, health impact assessment, socio-economic assessment, and social impact assessment (Public Registry # 254). It was argued social impact assessment in the *Comprehensive Study* gave no discussion of impacts on community social structure, infrastructure, social stability, non-traditional economy, cultural well-being, or health (Public Registry #254). In addition, there was a lack of information on traditional use of land and resources, how these activities might be affected, and how possible effects could be addressed or mitigated (Public Registry #254). In considering the socio-economic impacts of the project, there was no substantial discussion of mitigation, and De Beers offered no

monitoring programs (Public Registry #254). Instead, De Beers attempted to deal with issues that are social or economic in nature in the Impact Benefit Agreement (IBA) negotiated with Attawapiskat First Nation. Government regulators pointed out that as this was a private agreement not open to public scrutiny, it could not be considered as a replacement or alternative to fulfilling requirements (Public Registry #254). Further, De Beers only negotiated an IBA with Attawapiskat, and not other First Nations in the region.

First Nations communities made it clear from the outset that an examination of social impacts was a priority. In the February 12, 2004 comments on the draft guidelines, Attawapiskat Chief and Council stated:

> The "environment" to be assessed must reflect the relationship between the land and our people. Therefore, the "environment" must also include the social, economic, recreational, cultural, and spiritual conditions and factors that influence our lives and our community. This broader understanding of the environment should inform the assessment of the environmental effects of the Project, including their significance; the need for and design of proposed mitigation measures; and the need for follow-up programs (Letter from Attawapiskat Chief and Council to CEAA, February 12, 2004: Public Registry #120).

The consulting firm Gartner Lee, working on behalf of Attawapiskat First Nation, rightly predicted that there might be discrepancies over the definition of environmental effect contained in the CEAA, and the level of socio-economic investigation desired by Attawapiskat. Therefore they recommended,

> The Guidelines clearly indicate that the environmental effects to be considered in the CS (comprehensive study) are not limited by the definition of "Environmental Effect" contained in the Canadian Environmental Assessment Act (Gartner Lee, Review of Draft Guidelines, January 19, 2004: 8).

This recommendation was not heeded in the final guidelines, which stated, "environmental effects of the project are changes in the biophysical environment caused by the project, as well as effects that flow directly from those changes" (Canada, 2004: 14). However, the guidelines also direct De Beers to "assess the effects of the proposed project and its closure on the cultural well-being of the affected communities. This will include, for example, anticipated or possible changes on social cohesiveness or language use" (Canada, 2004: 34). Thus, while the definition of environmental effects is limited, an examination of social impacts beyond direct physical links is also required.

De Beers' previous attempts to garner socio-economic information from the community of Attawapiskat consisted of a series of workshops and community meetings conducted by the consulting firm Golder Associates. Focus groups were held in August of 2003, followed by community meetings in September and workshops in October. The meetings were on the themes of health, education, business and employment, family issues, and a separate meeting and workshop was held with community Elders. Immediately there were problems with attendance and communication with Chief and Council during the focus group session in early August, as this was a time when many people were out of the community. For example, at the Education Focus Group on August 2, 2003, only two participants attended who were not on the committee running the meetings (De Beers, 2004, Appendix G: 10). Most of the people involved in education were out of the community until school started in September, a problem not anticipated by the organizers (De Beers, 2004, Appendix G: 10). Another problem for the organizers was that Elders were not interested in doing individual interviews, which were intended to fill in gaps identified in focus group meetings (De Beers, 2004,

Appendix G: 14). Many of the Elders had already been through interviews for the Traditional Knowledge Study, and appeared not to have an appetite to repeat the process. Instead they wished to have multiple meetings in larger groups on each topic with time to reflect. Otherwise the Elders felt there would be "too much *he said-she-said* conversations and finger pointing (De Beers, 2004, Appendix G: 14). De Beers, stymied in their efforts to conduct individual interviews, proceeded with community meetings and workshops without adapting this part of the process. However, attendance problems continued to plague each phase of meetings. Often only a handful of people who were not with Golder Associates or the Community Advisory Committee set up by Attawapiskat would attend the meetings.

The problems De Beers and their consultants encountered became justifications for avoiding socio-economic investigations altogether. One of the primary reasons cited by De Beers for not fulfilling socio-economic study requirements mandated by the guidelines, was that Attawapiskat First Nation prevented De Beers and their consultants from speaking directly with key people and did not want them collecting certain kinds of information (Public Registry #296). Attawapiskat's Chief and Council replied that "this is an accurate assessment and reflects the level of confidence that Attawapiskat First Nation has in De Beers and their consultants" (Letter from Attawapiskat Chief and Council to CEAA, October 29, 2004: Public Registry # 315). In light of past issues with De Beers' collection of socio-economic data and their continued reluctance to further investigate social impacts, Attawapiskat Chief and Council made the recommendation,

> That the focus needs to shift from forcing De Beers to collect socio-economic information for the purposes of effects assessment under the Canadian Environmental Assessment Act, to working collectively to

> develop and implement an effective socio-economic monitoring program. De Beers appears to be unwilling to undertake the collection of socio-economic information as required in the Guidelines. De Beers and its consultants have also been unable to gain the confidence of our community to undertake further socio-economic studies. The existing approach has not produced the desired results (Letter from Attawapiskat Chief and Council to CEAA, October 29, 2004: Public Registry # 315).

Attawapiskat Chief and Council further comment,

> A decision by the Responsible Authorities not to enforce the Guidelines would be regrettable and lead us to question the intent of the assessment process. Not to collect the necessary socio-economic baseline data and to develop an appropriate monitoring program is simply unacceptable (Letter from Attawapiskat Chief and Council to CEAA, October 29, 2004: Public Registry # 315).

As De Beers' lobbying to limit the socio-economic component of the Victor environmental assessment was ultimately successful, it appears Attawapiskat First Nation was correct in questioning the intent of the assessment process. Natural Resources Canada informed De Beers on November 3, 2004, that socio-economic indicators that do not have a direct biophysical link would not be included in the comprehensive study report (Letter from NRCanada to De Beers, November 3, 2004: Public Registry #321). Thus community issues, such as barriers to employment, training and education, housing, crime and security, family violence, drug and alcohol abuse, and health care would not be dealt with in the Victor environmental assessment, despite the great importance First Nations communities and organizations attached to these issues. De Beers is encouraged, but not required, to collaborate with Indian and Northern Affairs and Health Canada in collecting the excluded information (Public Registry #321). An appendix on socio-economic information is included in the final report, but is excluded from consideration by federal regulators. To fill the gap left by the environmental assessment, the

Mushkegowuk Council proposed a socio-economic baseline study (Public Registry #329), and Attawapiskat First Nation proposed a work plan, prepared by Gartner Lee, for a socio-economic assessment and monitoring framework (Public Registry #335). A working group was created in early 2005 with the goal of establishing how to monitor and manage socio-economic effects of the Victor Project (Public Registry #501). However, Indian and Northern Affairs suspended the group's activities in March of 2005 until agreements in the environmental assessment were finalized, following release of the *Comprehensive Study Report* (Public Registry #501).

The limitation of social impacts under investigation to those that are directly related to physical effects was a betrayal to First Nations communities. Attawapiskat in particular identified socio-economic study as a priority early on in discussions with federal officials. Its inclusion in the guidelines should have ensured the First Nation's wishes would be met. The rationale for the change in requirements was that it was all that was required of De Beers under the CEAA; however, this is a very narrow interpretation. The CEAA (1992) indicates that socio-economic and cultural impacts are considered environmental effects if they result from "any change that the project may cause in the environment" (subsection 2:1). Because the Act describes the environment as including "all organic and inorganic and living organisms" (CEAA, 1992, subsection 2:1), it should be assumed that people are part of the environment. However, it was De Beers' contention that the Act limits social considerations to circumstances that can be directly related to biophysical impacts of the project, not including human behaviour. While De Beers may be able to argue that the definition of "environmental effect" contained in the CEAA is limited to those directly related to biophysical impacts of the

project, the Act also states that the Minister or Responsible Authority may require to be considered "any other matter relevant" (CEAA, 1992, subsection 16:1e). Thus while the definition of environmental effect may be perceived as limiting, federal authorities can expand what is considered in an environmental assessment if they choose to do so as there is no indication of what constitutes relevance.

De Beers did submit an Economic Impact Study (AMEC, 2004) as part of the comprehensive study. However, it was no substitute for weak socio-economic investigation in First Nations communities. The study gave very little discussion of, and places no value on, the subsistence economy. Although the continued importance of subsistence hunting and trapping to the community of Attawapiskat is recognized, the implication appears to be that this is only so because of a lack of wage income. There was no attempt to link the Economic Impact Study to the Traditional Knowledge Study that would be necessary to draw any conclusions as to what impacts might be on local First Nations communities. Instead, the only source quoted was Brian Cummins' 1999 study of Attawapiskat, and the discussion of regional communities was limited to the line, "(a)ll communities on the west and east sides of James Bay hunt and trap on a subsistence basis to a greater or lesser degree than the residents of Attawapiskat" (AMEC, 2004: section 4, p15). Thus, the study emphasised benefits to the region, such as wage income, business opportunities, compensation through the IBA, and new facilities. However, there was little understanding of how the traditional economy might be impacted, and what the consequences may be, both during the project and after the mine closes.

First Nations communities insisted that a thorough examination of socio-economic impacts needed to be part of the Victor environmental assessment, and this objective was reflected in the guidelines. Given that De Beers raised no objections to its inclusion in the guidelines, their claim that they needed only to investigate effects derived from physical impacts raises the question as to whether they ever intended to honour the guidelines in the first place. Their half-hearted attempts at socio-economic study further suggest De Beers did not make it a priority. Agreeing to socio-economic assessment requirements in the guidelines gained the consent of First Nations to proceed with the comprehensive study. Had De Beers indicated their opposition when the terms of the guidelines were being set, there would have been much opposition from First Nations communities. The about face from De Beers during the comprehensive study consultations was very convenient for the company, especially if they knew there would not be the political will from the federal government to stall the project until a proper socio-economic assessment was completed.

The Final Comprehensive Study Report

The federal government and De Beers released the final *Comprehensive Study Report (CSR)* on June 10, 2005, and the federal government established a thirty-day public review period. Its conclusion stated:

> The RAs have determined that there are no likely significant adverse environmental effects resulting from the project after mitigation is applied.

> In addition, there are no significant adverse cumulative effects predicted (*CSR*, 2005, Section 9:5).

However, major issues to First Nations communities remained unresolved, challenging the sweeping conclusion of the report. In particular, the *Comprehensive Study Report* indicated that an environmental and socio-economic agreement would be finalized to deal with commitments and mitigation measures that were not covered in the environmental assessment. This was necessary following De Beers' success at limiting socio-economic examination in its comprehensive study. However, the substance of this agreement remains uncertain following the suspension of discussions by Indian and Northern Affairs. Attawapiskat First Nation indicated in their review of the *CSR* that they wanted this agreement in place before any authorizations related to construction were in place (Public Registry #501). The Mushkegowuk Council argued in its review of the *CSR* that a regional First Nation Impact Benefit Agreement needed to be negotiated in order to monitor and address impacts that have not been addressed in the environmental assessment (June, 2005).

An apparent casualty in the decision to limit socio-economic effects was any significant gender analysis as it would be difficult to link this to any biophysical effect. Both Lise-Aurore Lapalme at Natural Resources Canada and Deborah McGregor at Environment Canada cited the lack of gender analysis in the Victor environmental assessment as a significant weakness. Environment Canada had argued in its comments on the Comprehensive Study that Traditional Knowledge needed to be analyzed by gender (Public Registry #289). AMEC's response on behalf of De Beers simply highlighted some of the historical gender roles among the Attawapiskat Cree uncovered

in the Traditional Knowledge Study (Public Registry #299). However, there was no discussion of how the Victor Project might impact these roles and how it might affect men and women differently. This was despite the fact that while both male and female participants in the TEK Study were interviewed, the participation rate was over three men to every woman[4]. The greater participation of males was not questioned, although the emphasis on big game animals favoured the Traditional Knowledge of men. AMEC themselves noted in their response that hunting big game is a task "usually undertaken by men" (Public Registry #299: 5), as this is one of their historic gender roles. In addition, the work schedule at Victor will require two-week periods away from home, placing the strain of prolonged absences on families.

De Beers attempted to downplay the value and importance of examining socio-economic effects, thereby justifying superficial treatment in the environmental assessment. The *CSR* stated:

> *The assessment of socio-economic effects, even where complete and accurate baseline data are available, is to some extent a speculative exercise because of aspects relating to societal complexity and matters of personal choice* (italics in original) (*CSR*, 2005, Section 7:3).

The *CSR* contrasted socio-economic effects with environmental effects, stating the former needed to be examined in terms of potential and were largely irreversible, while the later were predictable and reversible (2005, Section 7). Therefore, De Beers indicated that uncertainties in predicting socio-economic effects could be resolved by observing general trends in macro-economic indicators, stating:

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[4] TEK Study respondents included 50 males and 15 females, and validation sessions included 27 males and 11 women participants (Public Registry #299).

> Overall, economic growth, employment and increased incomes are associated worldwide with improvement in the quality of life. To the extent that people have tried to model socio-economic effects (such as in the model available to Ontario's Ministry of Natural Resources for specific communities), they incorporate this positive relationship (again, at the aggregate level) between projects and improvements in socio-economic parameters such as rates of divorce and crime (*CSR*, 2005, Section 7:3)

However, there is no indication that economic growth will continue in the region, and there may in fact be a contraction. De Beers stated that there were "no other projects in the area that are known to be economically viable", and therefore concluded "the project will have no cumulative effects of significance on the AttFN (Attawapiskat First Nation)" (CSR, 2005, Section 7:24). While the possibility of cumulative effects was dismissed by De Beers' claim that there would not be any other projects in the region, there was no examination of the effects of job losses when the mine closes.

De Beers' statements regarding socio-economic effects were particularly relevant in their interpretation of potential impacts on traditional pursuits. De Beers concluded, "there will be no effects on most elements of traditional pursuits" (*CSR*, 2005, Section 7:8), and that "the project will provide continuing opportunities to engage in traditional pursuits on the one hand, and the income to purchase materials and equipment needed for traditional pursuits on the other" (*CSR*, 2005, Section 7:9). It was not stated how the project would provide opportunities, and assumed employees partaking in land based activities in their time off constituted traditional pursuits. Thus, De Beers concluded:

> If traditional pursuits do decline as a direct result of the project, this will be because of personal choice rather than because of project-induced pressures, with the possible exception of the effects of increased contact among the project workforce with the non-aboriginal world and consequent shifting cultural values. The exception to this is the

> prohibition on some traditional harvesting in the immediate area of the mine (*CSR*, 2005, Section 7:9).

The issue of Traditional Ecological Knowledge for monitoring and mitigation purposes also remained unresolved. While the *CSR* proposed a follow-up program "to identify and monitor the biophysical effects of the project on traditional pursuits, values, and skills", and that "local First Nations have requested that this program include the consideration of TEK aspects" (2005, Section 8:17), there was no firm commitment. Attawapiskat First Nation supported "the proposed scope of the monitoring program as a starting point for further development in the environmental and socio-economic agreement" (Public Registry #501). However, the Chief and Council pointed out that baseline data collected during the Traditional Knowledge Study was incomplete, and reiterated their wish for further collection of Traditional Knowledge information as part of the socio-economic monitoring framework (Public Registry #501). In addition, the Traditional Knowledge Study did not collect information for the purposes of monitoring and mitigation, which the First Nation argued must be completed before any authorizations for construction were issued (Public Registry #501).

While elimination of the proposal to transport fuel through James Bay was the major concession coastal First Nations achieved in the environmental assessment process, the *CSR* left doubt as to whether there would still be some fuel transport in James Bay. The *CSR's* description of the power supply for the Victor Project stated that as a result of the use of grid power transmission, "ocean-going tankers and barges will not be required for fuel delivery, as previously proposed in the CSEA" (Canada, 2005, Section 2:18). However, the *CSR's* later discussion on environmental effects in the James Bay Coastal

Zone mentioned "the exception of very small amounts (approximately 60,000L/a) to assist with winter road construction, or to dredge the James Bay entrance to the Attawapiskat River" (Canada, 2005, Section 6:117). De Beers attempted to justify this amount of fuel shipment as "small in proportion to the approximately 2 ML shipped annually to Attawapiskat in the recent past" (Canada, 2005, Section 6:118), before Attawapiskat was connected to the power grid. As fuel transport in James Bay was to be completely eliminated from the project proposal, as well as the need to dredge at the mouth of the Attawapiskat River, First Nations representatives voiced their objection. Both the Mushkegowuk Council and Attawapiskat First Nation indicated that they did not support any fuel transport in James Bay, and asked that the *CSR* be clear on the issue; however, there was no indication of a response by De Beers posted to the Public Registry.

Of all the direct physical impacts of the Victor Project, hydrologic issues proved the most contentious. De Beers' plans to keep the site dry included the construction of approximately 20 wells surrounding the open pit site to extract moderately saline ground water, and pump it through a pipeline into the Attawapiskat River (De Beers, 2004). Sump pumps would extract water from the open pit, and ditches would be needed to keep the general site dry. South Granny Creek, which runs through the mine site, would also have to be diverted away from the pit perimeter. The extraction and diversion of surface and ground water would result in reduced creek and river flows in the area, with the exception of increased volume in the Attawapiskat River, and subsidence of land in the area due to the extraction of ground water. Attawapiskat First Nation and their consultants, Gartner Lee, raised several concerns during the first public review period. In

particular, the depth and amount of area susceptible to subsidence expected in De Beers' computer generated modeling was questioned. The effect of saline water discharged into the Attawapiskat River was also a concern, as was the potential for mercury contamination if a substantial water body formed in the area of subsidence.

Hydrology continued to be an issue during the *CSR* review period. The federal government required further study from De Beers following the original release of the *CSEA* due to major continued uncertainties. Lise-Aurore Lapalme of Natural Resources Canada noted that the numerous studies completed by De Beers and their consultants still remained largely theoretical (interview August 10, 2006). She stated that "digging a hole in water is an experiment" (interview August 10, 2006) in which the full impacts of the project will only be known as the project proceeds. The technical issues related to the environmental assessment were a major stumbling block for First Nations' participation. Former Attawapiskat First Nation Chief Theresa Hall stated that Band Council representatives and community members did not fully understand the volumes of water that would be pumped from the site and into the Attawapiskat River (interview, August 29, 2006). Current Chief Mike Carpenter noted that they could not understand much of the material presented in the environmental assessment, and thus had to rely heavily on outside consultants (interview August 30, 2006). In addition, dealing with issues related to the Victor Project and the environmental assessment has created "three to four times the workload" (Mike Carpenter, interview August 30, 2006) for the Attawapiskat First Nation Band Council.

While the public review period following the first release of the Comprehensive Study involved significant discussions and more research, the review period following

the final Report appeared to be little more than a formality. This is despite the fact that far more people and organizations provided responses following the *CSR*. It is at this time that environmental organizations began to take a more active role in raising concerns. The Wildlands League, in particular, initiated a letter writing campaign calling for the Victor assessment to be referred to a review panel. However, environmental organizations' arguments had little effect following the *CSR* as the assessment was all but complete. As much of the research and consultations with communities in the remote region occurred before discussions began on the guidelines, the project was largely out of sight of the general public. Thus, environmental organizations only became aware of the project when discussions on the guidelines began, greatly limiting their involvement with the project. Several First Nations requested an extension on the thirty-day review period as their issues were still not properly addressed, as well as the lack of time, money, and expertise in many communities to properly review the *CSR*. However, the requests were refused on the grounds that they had already been sufficiently consulted, and that the *CSR* did not propose significant changes that had not already been discussed with the communities.

On August 19, 2005, the federal Minister of the Environment, Stéphane Dion, announced that,

> The proposed Victor Diamond Mine Project in Northern Ontario does not require further assessment by a review panel or mediator under the Canadian Environmental Assessment Act (CEAA *News Release*, August 19, 2005).

This cleared the way for De Beers to gain the necessary federal permits and begin construction at the Victor mine site. The Provincial Minister of the Environment, Laurel

Broten, approved the remaining provincial environmental assessment requirements relating to the power transmission corridor and winter road construction on October 24, 2005. On November 4, 2005, Attawapiskat First Nation and De Beers officially signed the Impact Benefit Agreement that was ratified by a June 21, 2005 vote. De Beers had now completed all the necessary steps required by federal and provincial regulators to mine diamonds in the muskeg of the traditional territory of the Attawapiskat Cree.

The review period of the final *CSR* did little to address concerns that remained from the first public review period. Attempts to have an environmental and socio-economic monitoring side agreement in place with the federal government before project approval were unsuccessful. This would have compensated in part for the gaps in the environmental assessment, the largest being the limited socio-economic analysis. The socio-economic effects that were examined in the Victor assessment are largely inadequate and contain numerous unjustifiable statements. The lack of rigour in assessing socio-economic effects is not surprising given the caveat De Beers included in the *CSR*, which characterized its examination as mere "speculation". This purposely ignored the history of development projects, and mining in particular, in Indigenous peoples' territories. Any examination of this history would reveal a very troubled legacy for Aboriginal peoples. It might have also call into question the history of De Beers', something that was never examined in the environmental assessment. Given the colonial legacy of South Africa in which De beers is an integral part, it is clear to see why they would want to dismiss that history. It is curious how the Attawapiskat Cree are required to demonstrate their long-standing and intimate relationship historically with their lands in order to be included in the environmental assessment and to be compensated in the

IBA; however De Beers was not required to demonstrate their history which would have drawn attention to the immense profits and power the company has obtained by exploiting Indigenous peoples and their lands.

De Beers' disregard for gender issues sidesteps another contentious issue that could possibly have profound effects on the community of Attawapiskat. As employment opportunities as a result of the Victor Project will in all likelihood favour men, there will undoubtedly be different and unequal effects on gender. This is in part a reflection on the weakness in De Beers' investigations of Traditional Knowledge and Indigenous ways of life. De Beers' conclusion that impacts from the project on traditional ways of life would simply be a matter of personal choice further avoids substantive discussion on issues of vital importance to first Nations. This may also have implications for the community of Attawapiskat from job loses when the victor mine closes. If less people are able to engage in traditional activities because the economic focus turns to training and employment at Victor, the economy of Attawapiskat could be in worse condition once De Beers leaves. The very real potential for Victor to undermine the subsistence economy while providing only short-term benefits of an industrial economy goes unexamined in the *CSR*; an inexcusable omission that leaves Attawapiskat First Nation vulnerable. The burden of responsibility to protect the First Nation's interest in the Victor development was and is an immense challenge. Reliance on outside experts, changing aspects of the project, and the shear volume of work made it very difficult for Attawapiskat First Nation representatives to be sure they had properly addressed the issues. This was exacerbated by continual pressure from De Beers to advance the project before the community was ready. De Beers expressed the flawed belief that, in contrast

to social systems, ecosystems are predictable. The complexities involved in the hydrological studies gave an indication of how much uncertainty predictions in natural systems are subject to, as are predictions that involve human behaviour. The scientific and technical nature of hydrological studies meant that, while a great deal of time and extra research was expended, local communities viewed these investigations largely from the sidelines. This reflected the overwhelming preference for quantifiable data that further diminished the contributions local communities could make. De Beers's claim that the local socio-economic environment could be inferred from macro-economic measures overlooks the localized experience of place, something that an effective incorporation of Traditional Knowledge would provide.

5. Traditional Knowledge and the Victor Diamond Project

The inclusion of Traditional Knowledge promises a fundamental way in which Aboriginal peoples can be involved in the environmental assessment process. This offers a more substantive contribution than normal public participation measures allow for, as the interpretations of natural and social environments of Indigenous peoples are to form part of the knowledge base on which decisions are made. Thus, it should provide a greater role than simply raising concerns at public meetings. Traditional Knowledge presents the opportunity to enhance the epistemological base of environmental assessments and create outcomes that respond and give agency to Indigenous peoples. This will also lead to a more complete understanding of the ecology of development as culture and environment are often treated as interconnected entities in Indigenous worldviews. The inclusion of Traditional Knowledge does not simply stem from the procedural possibility suggested by the CEAA, or from, in this case, the guidelines for the Victor environmental assessment. It is based in the legal rights of Aboriginal peoples, which in turn arises from their treaty rights to maintain traditional ways of life. However, the willingness of Aboriginal peoples to offer their Traditional Knowledge to processes such as an environmental assessment comes from more than their legal right to do so. Long occupancy and spiritual connection to traditional territories implies a responsibility to the land itself, which can only be fulfilled if their relationship with the land is maintained. This chapter sets out to examine how Traditional Knowledge was

incorporated into the Victor environmental assessment, and to discuss community members' experience with the Victor project proposal. This will include a discussion of traditional ways of life, the perceived impacts of the Victor Project, and an examination of how effective the environmental assessment process was for furthering the goals of the Attawapiskat Cree. The focus will be on statements made by Attawapiskat First Nation with regards to Traditional Knowledge, De Beers interpretations and responses, and issues that were discussed in interviews with community members. All parties to the environmental assessment have recognized that it is the Indigenous peoples of the Mushkegowuk region that hold and are the authority on Traditional Knowledge in the proposed project area. Therefore, it is vital that their interpretation of the Victor assessment be heard.

Incorporation of Traditional Knowledge in the Victor EA

De Beers claimed it extensively and significantly incorporated Traditional Knowledge into the Victor environmental assessment, stating it was particularly applicable to descriptions of the environment, and the effects analysis of both the natural and socio-economic environments. The collection of Traditional Knowledge by De Beers involved both formal and informal methods. Formal collection was completed through research studies in which the Traditional Ecological Knowledge (TEK) Study with Attawapiskat First Nation completed on February 18, 2004, was the primary document. In addition, the project re-evaluation required two more studies with respect

to off-site activities. A Component TEK Study completed and issued on August 13, 2004, examined the proposed inland winter road route from Hearst to the Victor site, and the Mushkegowuk Council undertook a study in relation to the coastal transmission line that built on an environmental assessment completed in 1997 for the already existing line. The transmission line study was part of the provincial environmental assessment requirements in which De Beers, Five Nations Energy, and Hydro One were co-proponents. The *CSR* also described the informal collection of Traditional Ecological Knowledge, commencing when environmental baseline studies were first conducted in 1999 (Canada, 2005). De Beers claimed this occurred when Attawapiskat First Nation members employed in field data collection provided valuable information to guide research focused on fisheries, wildlife, and river systems (Canada, 2005). Another important source of Traditional Knowledge was from numerous meetings and workshops, particularly those conducted in Attawapiskat (Canada, 2005).

Formal Methods

Work began on the Traditional Knowledge Study with Attawapiskat first Nation in April of 2002. A Working Group was established consisting of Attawapiskat First Nation members and representatives of AMEC, who was the consulting firm hired by De Beers to undertake the environmental assessment. A definition of Traditional Ecological Knowledge offered by the Study Working Group stated:

> TEK is based upon thousands of years and generations of experience of living off the land. It is not only a source of knowledge, but it is also a way of life. As this knowledge is acquired, it is passed on to succeeding generations or other people through a variety of mediums, including language, ceremonies, stories and spirituality. Therefore, TEK comprises activities of the past, present and future generations related to subsistence harvesting such as hunting, fishing, trapping, berry picking and medicinal plant gathering, as well as lifestyle activities related to camping, spirituality, ceremonies, communication, transfer of knowledge from one generation to another, births and burials (Attawapiskat First Nation, 2004:1).

Therefore Traditional Ecological Knowledge was considered to be much more than simply known information about the environment; however, the definition provided a rather limited list of what TEK comprises.

The terms of reference for the TEK Study directed the Working Group to collect environmental and socio-economic information, particularly as it pertains to baseline data collection and impact assessment. However, it was stated, "at this time...the TEK Working Group shall not be concerned with issues of mitigation or monitoring" (Attawapiskat First Nation, 2004:2). The TEK Study in this format was conceived by Attawapiskat First Nation to be only the first part, as monitoring and mitigation would be dealt with in further studies once there was sufficient baseline information and impact assessment. The study largely consisted of interviews, in which 65 community members participated, and mapping and data verification sessions. The majority of interviews were conducted in Cree, depending on the preference of the participants, and confidentiality of the participants was maintained. The TEK Study focuses on land use and renewable resources, and emphasized geographically mapping the collected data. Interview data was summarized and mapped, then presented to participants in group validation sessions, and then presented to the community in open house sessions. The

maps detail such things as travel and trails, gravesites, place names, trapping areas, and wildlife.

The TEK Study's Final Report gave an overview of the Attawapiskat Cree's seasonal round, describing the past when Attawapiskat was established as a trading post, but before the Cree lived there full time, and how the seasonal round is practiced in the present. The study described traditional methods of travel, such as canoes, snowshoes, and sleds and dog teams. It also described important camping sites, burial sites and rituals, and Cree place names. The largest section of the study on renewable resources focuses on plant and animal species, particularly those that have been harvested in the past and present by the Cree. Four major themes related to renewable resources were discussed in the TEK Study: importance of the species; harvest location and habitat of the species; harvesting techniques; and how the Cree used the animals they hunted (Attawapiskat First Nation, 2004). There was also some discussion of the Attawapiskat Cree's spiritual connection to certain species. The study finished with a brief discussion of natural springs, unusual rock formations and how weather patterns have changed in recent times.

The TEK Study established for purposes of the environmental assessment that the Attawapiskat Cree have an intimate and long-established understanding of the environment in their traditional territories. It described certain aspects of their knowledge in relation to resource use and traditional practices. The study gave little indication of what the impacts of the Victor mine development might be, although impacts already occurring are mentioned on occasion. For example, it was noted that caribou were hunted near the Victor site until recent times. However, "it was no longer

feasible to hunt there due to the animal's disappearance as a result of exploration activity, particularly the planes, that scared them away" (Attawapiskat First Nation, 2004:35). The statement was somewhat dismissed as the Study further noted that, "other hunters think that air traffic has made no difference in the caribou's migration pattern" (Attawapiskat First Nation, 2004:35). The reader is often left without any clear sense of what the impacts of the Victor Project might be on the environment from a Traditional Knowledge perspective. The value of the TEK Study to the environmental assessment process was that it gave a clear rationale as to why the holders of Traditional Knowledge needed to be involved in decision-making, as it provided a glimpse into the Attawapiskat Cree's engagement with their environment. As further Traditional Knowledge studies to address mitigation and monitoring were never completed, the TEK Study remains an unfinished endeavour, a preliminary study that should have been the starting point for further investigation.

The Component TEK Study conducted in relation to the proposed inland winter road between the Hearst/Constance Lake area to the Victor mine site was a much smaller version of the Attawapiskat TEK Study. Information from the Attawapiskat study was incorporated into the Component TEK Study, as well as interviews with 26 members of Constance Lake and Fort Albany First Nations, most of whom were male elders. Seven interviews were conducted in Marten Falls; however, their information was not employed in the study. The community withheld the information because they did not support De Beers' road plans that would bypass the community. While Kashechewan originally agreed to participate, they later withdrew with the plans of conducting their own TEK study. The Component TEK Study, completed over an eleven-day period and without

any validation sessions, was very preliminary in its scope. It followed the same format as the Attawapiskat study, only focusing on information related to the proposed transportation corridor, and again did not address mitigation or monitoring.

TEK information regarding the proposed transmission corridor was a composite of surveys conducted in 1997 for an earlier environmental assessment, the TEK Study in Attawapiskat and the Component TEK Study, and research conducted in communities along the proposed transmission corridor in the winter of 2004-05. The Traditional Knowledge research along the transmission corridor involved surveys and interviews with about 160 participants in eight communities. The study was largely a land use survey, documenting hunting, fishing and trapping activities, and mapping places of cultural and spiritual importance. De Beers argued Traditional Knowledge collected studying the transmission corridor and the proposed inland winter road fulfilled their obligation to consider Traditional Knowledge in the region outside of Attawapiskat's traditional territories. However, the Mushkegowuk Council, like Attawapiskat, felt De Beers had not met the guidelines as mitigation and monitoring issues had not been considered for the transmission and winter road corridors, much less the entire project.

Informal Methods

Informal methods of collecting Traditional Knowledge applied by De Beers involved instances where information was offered by First Nations peoples outside of formal investigations. This occurred in a variety of circumstances resulting from the

engagement of De Beers and their consultants with First Nations during advanced exploration and research, and from community consultations. Traditional Knowledge that was collected through the formal studies was cited in the *CSR*. However, when information was gathered informally De Beers noted it was unlikely to be referenced, although they claimed it was still considered in the assessment (Canada, 2005).

One of the informal methods utilized by De Beers involved the employment of research assistants from Attawapiskat. De Beers stated that they "view the collection of environmental data to be a collaborative effort between the Proponent's consultants and members of the AttFN (Attawapiskat First Nation) that assisted in data collection" (Canada, 2005, Section 6:2). Members of the First Nation were involved in the collection of fisheries data, caribou and moose aerial surveys, small mammal tracking surveys, soil and vegetation surveys, water flow analysis, and the collection of archaeological and heritage data (Canada, 2005). Discussions between field researchers and assistants on how best to collect and interpret data was considered by De Beers to be a significant source of Traditional Knowledge (Canada, 2005).

Another argument made by De Beers was that community consultations with Attawapiskat amounted to the collection of Traditional Knowledge. De Beers claimed that during consultations "the Proponent was provided with numerous insights as to the potential effects of the project on the environment" (Canada, 2005, Section 6:3). This occurs during general public meetings and discussions with Chief and council, and in focus groups, meetings and workshops conducted as part of the socio-economic impact study conducted in 2003. It was during consultations with First Nations in the region that attention was drawn to problems with De Beers plans for shipping fuel, and socio-

economic discussions provided De Beers with much information and insight into the community.

Effectiveness of Traditional Knowledge Integration

When drafting the guidelines for the Victor environmental assessment, the Attawapiskat Chief and Council made it clear that they intended Traditional Knowledge to inform much of the environmental assessment, including mitigation measures, determination of significance, and monitoring and follow-up programs (Public Registry #120). In assessing project related effects upon the natural environment, De Beers argued it "has incorporated both scientific and TEK perspectives in a manner they believe is both positive and affirmatory" (Canada, 2005, Section 6:3). Claims such as this led many to question De Beers' understanding of Traditional Knowledge. Attawapiskat Chief and Council noted that "while De Beers may consider itself to be in a position to present its understanding of our traditional knowledge, as holders of that knowledge, we will assess whether De Beers' understanding is correct" (Letter, Attawapiskat First Nation to CEAA, February 12, 2004: Public Registry #120). The Chief and Council claimed in their comments on the CSEA that De Beers failed to meet the guidelines with respect to Traditional Knowledge, stating:

> Traditional ecological knowledge (TEK) collected by De Beers for the CSEA is contained in the TEK Study, which is primarily a summary of some of our land use, harvesting techniques and history. It does not generally fulfil the purpose as stated in the Terms of Reference (TOR) and

> methodology for the study (Letter, Attawapiskat First Nation to CEAA, October 29, 2004: Public Registry #315).

The Terms of Reference for the Traditional Knowledge Study that De Beers failed to meet according to Chief and Council were: to respond to the concerns and sensitivities of the Attawapiskat First Nation; improve impact assessment; assist in project planning and design; and because of the aforementioned deficiencies, fulfill regulatory requirements (Public Registry #315). They further stated:

> While it was reasonable to expect that our members on the TEK Working Group were knowledgeable of their own concerns and sensitivities regarding our land use, history and harvesting techniques, it was unreasonable for De Beers to assume that our members were knowledgeable in how to improve impact assessment, to plan and design a diamond mine and to undertake a TEK study to fulfil regulatory requirements (Letter, Attawapiskat First Nation to CEAA, October 29, 2004: Public Registry #315).

The contention of Chief and Council is that De Beers did not provide adequate resources and expertise for the community to discuss these objectives meaningfully (Public Registry #315). Therefore the community was limited to descriptive summaries of the environment and traditional practices that have no bearing on the project.

Attawapiskat Chief and Council had also argued that they viewed an examination of social, health and economic issues, in conjunction with monitoring and managing socio-economic effects, as an appropriate route for the community to properly prepare for the Project (Public Registry #324). As De Beers has attempted to describe processes such as this as simply a matter of "personal choice", issues of great importance to the community that are intimately tied to the Victor development are not further investigated. Environment Canada's Deborah McGregor argued that it was in socio-economic study that Traditional Knowledge could have been particularly valuable, stating the largest flaw

in the Victor environmental assessment was the exclusion of much of the social impact assessment (interview, December 7, 2006). De Beers' earlier agreement to the terms of the guidelines raises doubt as to whether De Beers ever intended to honour requirements for socio-economic study. Thus, while De Beers claimed community consultations were a valuable source of Traditional Knowledge, they actively suppressed areas where Traditional Knowledge was particularly relevant. In addition, as information gained in investigations of social impacts were to inform compensation and program strategies in the IBA, the weakness of the socio-economic component of the environmental assessment likely limited costs and commitments incurred in the agreement. Rather than preparing the community to deal with the impacts of development, the social impact portion the Victor environmental assessment worked against the interests of Attawapiskat First Nation and leaves the community vulnerable.

De Beers' employment of local people in field research was good for both the community and the company as it reduced costs, created a working relationship with community members, and local peoples were able to provide helpful information in the conduct of research. Nevertheless, it cannot be assumed that this incorporated Traditional Knowledge in any meaningful way. The field research conducted by De Beers and their consultants was entirely designed and interpreted from the standpoint of Scientific Knowledge, and any Traditional Knowledge was largely coincidental. For example, while the community was consulted on the Traditional Knowledge Study itself, there was little input into all other technical studies except to review conclusions. The fact that most of the field research was conducted before guidelines for the environmental assessment were established meant that any inclusion of Traditional Knowledge was

largely an addendum to finished research. In the Environmental Baseline Study Traditional Knowledge was largely absent from the entire description of the physical environment, and the description of TEK in the study's introduction was condescending. The Baseline Study stated,

> (TEK) observations tend to be anecdotal and may be interpreted within a spiritual context. Typically, the observations are taken at face value and are not subject to any particular form of analysis or verification, other than by way of reference to the prior experiences of individuals and group members (AMEC, 2004: 1-8).

This view does not recognize the legitimacy or complexity of Traditional Knowledge, and the suggestion that it is incapable of analysis or verification implies it is a lesser form of knowledge than science. Further, the relationship of assistants to those who conducted the study was hardly a relationship that empowered Traditional Knowledge as an equally legitimate way of understanding the environment. Rather, it was patronizing to Aboriginal peoples that De Beers considered this a significant part of their attempts to include Traditional Knowledge in the assessment.

While Traditional Knowledge certainly was a component of consultations with First Nations peoples, the vagueness in how De Beers assessed and incorporated discussions makes its effectiveness highly suspect. De Beers' treatment of socio-economic study raises further questions as to their commitment to Traditional Knowledge. The study itself was plagued by problems of poor attendance, poor scheduling, funding issues and an unclear mandate. It does not appear that De Beers placed a very high priority on the study, as demonstrated by their attempts to limit the scope of socio-economic investigation. Golder Associates, the consulting firm hired by

De Beers to complete the socio-economic impact study, appeared to have had little idea about how to approach the community. As discussed in chapter four, meetings were scheduled at inappropriate times in close succession, and many in the community were resistant to further study directed by De Beers and their consultants.

Nonetheless, Traditional Knowledge did inform a significant part of socio-economic discussions and its value to the community is demonstrated. These discussions provided a sense of how Traditional Knowledge is important for shaping perspectives on contemporary issues in Attawapiskat, something that was sorely lacking in all the TEK studies conducted by De Beers. For example, the Community Consultation Meeting held with Elders demonstrated that many were not necessarily against De Beers' plans for the mine development; however, they noted problems that come with it by taking a long view of their interaction with the Canadian government and other development proponents. Contamination, resource depletion, and dislocation from the land were stated as the result from past promises of development by the federal government (De Beers, 2004, Appendix H: Elders).

The minutes from socio-economic consultations and workshops also demonstrated how educational and healthcare institutions have provided poor quality services and do not incorporate traditional forms of education, health and healing. There was worry that the Victor development will provide employment that mirrors what has occurred in the areas of health and education. Success in the educational system or in professional training has often meant leaving the community in order to pursue career opportunities. There was the believe that those who obtain well-paid jobs with De Beers will leave for Timmins where they can spend their earnings on a wider variety of goods at

a lesser cost than is available in Attawapiskat. There were also concerns with the cultural impacts of an increasing dependence on wage labour. Nevertheless, community members wanted to ensure they maximized their opportunities for employment. Many saw this as particularly important for the youth. If the First Nation also received benefits in the form of better housing and more affordable consumer goods, local job opportunities might allow people to stay on the reserve rather than look to places where they could reap the benefits of their wages. The Victor Project was perceived as an opportunity to alleviate the impoverished conditions existing in Attawapiskat that could not be missed.

Traditional Knowledge was inextricably tied to community members' understanding of their contemporary issues. First Nations consultation and socio-economic investigations undoubtedly could have contributed significantly to a Traditional Knowledge perspective in the assessment. However, Attawapiskat was left susceptible to the possibility that De Beers and their consultants gleaned information from the community for their own purposes. Not only were consultations and studies structured around De Beers' agenda, they provided insights into divisions in the community and exposed opposition to Victor that could be neutralized. This gave De Beers a window into the community that they could exploit to their own advantage.

Attawapiskat's experience of conducting the Traditional Knowledge Study with De Beers was plagued by many problems that undermined the value of the exercise. The Chief and Council questioned whether De Beers took advantage of the community's lack of knowledge of the environmental assessment process in order to avoid their concerns (Public Registry #315). De Beers did not explain why they insisted on excluding

mitigation and monitoring from the TEK Study, and the exclusion was never formally addressed. Thus, the Chief and Council concluded:

> While the TEK Study details valuable land use information, Attawapiskat First Nation's overall experience in doing the TEK Study with De Beers was negative. We recommend that future TEK studies be undertaken by Attawapiskat First Nation with the technical assistance of others of our choosing and that De Beers' technical involvement be limited to consultation by Attawapiskat First Nation on Terms of Reference (Letter, Attawapiskat First Nation to CEAA, October 29, 2004: Public Registry #315).

De Beers' response to Attawapiskat's concerns reiterated their TEK collection efforts without addressing any of the issues Attawapiskat raised regarding a more substantive role for Traditional Knowledge. There is little indication De Beers considered Traditional Knowledge input into the environmental assessment as more than data and a general forum for concerns to be raised by the community. Decisions on how Traditional Knowledge would be employed in the environmental assessment were entirely left to De Beers and their consultants.

As such, Traditional Knowledge in the Victor environmental assessment was relegated largely to descriptions of the environment, particularly as it pertained to wildlife. On occasion those descriptions informed what De Beers and their consultants concluded the environmental effects of the project would be and their significance, particularly when they confirmed scientific findings. Traditional Knowledge also informed much of the socio-economic information; however, De Beers was successful in excluding much of this from the environmental assessment. It was also largely absent from mitigation, except in how it may have informed the objections of First Nations communities and organizations to particular aspects of the project, most notably the

proposal to ship fuel through Hudson and James Bay. And, finally, Traditional Knowledge was not incorporated at all in monitoring plans, except for noncommittal statements such as:

> It is anticipated that Attawapiskat FN may wish to participate in the follow-up program...The Attawapiskat FN community has traditional ecological knowledge that could assist in the refinement of the monitoring program, collection of information and the interpretation of any observed changes in the environment (Canada, 2005, Section 8:6).

Based on Attawapiskat's poor experience cooperating with De Beers on the Traditional Knowledge Study and its limited application, it is unlikely Traditional Knowledge was utilized in a way that was satisfactory to the community.

Attawapiskat Community Members' Assessment of the EA Process

The federal government, provincial government and De Beers hailed the Victor environmental assessment and related IBA negotiations as a great success and a true partnership with Aboriginal peoples. In a media release following federal approval of the Victor environmental assessment, De Beers stated:

> There has been an extensive collective effort over the last three years to ensure that the Victor mine will minimize impacts and maximize benefits for the people of northern Ontario. The First Nations communities in the region have been very involved in the EA process, and traditional knowledge has been incorporated in the project design and future monitoring plans (August 22, 2005).

The statement not surprisingly glosses over continued criticism by Aboriginal spokespeople about the limited extent of Traditional Knowledge incorporation. In

addition, the claim about minimizing impacts and maximizing benefits is suspect due to De Beers' suppression of socio-economic investigation to determine the nature of possible impacts and benefits. This section will examine how community members from Attawapiskat First Nation interpret their experience with Victor and the environmental assessment process, particularly as it relates to Traditional Knowledge. The discussion is based on interviews conducted in Attawapiskat during the summer and fall of 2006. This will be discussed in three parts: first, comments made in relation to the nature of Traditional Knowledge, traditional practices, recent history and the move into community life; second, perceived impacts and benefits of the Victor Project; and third, peoples' experience with the Victor Project and the environmental assessment process. The focus will be more on what the people of Attawapiskat themselves see as important in considering development questions, and how they perceive the Victor project as serving their interests. Thus, it is less concerned with what an environmental assessment is required to do, but rather if the environmental assessment process and its inclusion of Traditional Knowledge furthered the goals of the Attawapiskat Cree.

Traditional Knowledge: From the Land to the Community

Attawapiskat community members first and foremost discussed Traditional Knowledge as knowledge that comes from a way of life lived on the land. It includes all aspects of that life, including: a great deal of knowledge of the environment; Cree culture which is an expression of their intimate relationship with the land; spiritual practices to

maintain that relationship; and an understanding of changes that have occurred to the land and to their way of life. Elder Theresa Hookimaw discussed her experiences as a youth with her family. She stated that she was "born and brought up in the bush", and that her family would spend "ten months out of the year...out in their traditional hunting ground". They would come to the community of Attawapiskat in June, and leave again by the middle of August, going north along the coast by canoe to the Nowashi River and on to their winter hunting grounds towards the tree line. Theresa stated that at the time moose, as well as fur bearing animals such as the beaver, were scarce. However, birds were plentiful and they would "smoke geese and we used to put them outside just to store them for winter use, the long winter's use" (Theresa Hookimaw). Fish were plentiful near their winter camp, providing an important source of food. Her family would come to Attawapiskat to trade for goods in the summer:

> My late father really struggled with trapping until he had enough fur to sell, such as fox, mink, and otter, and he would come to this area to pick up the groceries that we use today. And back then they had some big company that used to come buy off the feathers from the migratory birds (Theresa Hookimaw).

As children, Theresa and her siblings would also participate in hunting and trapping small game as "nobody had rest in the old days, you have to move around and everybody knew his chores".

John Matatawabin is an elder in the community who has spent much of his life living on the land. Even though he now lives in the community of Attawapiskat, he still spends substantial time hunting to provide for his family. He knows the Victor Project area well, demonstrating this during the interview by showing his trapping licences from as far back as 1979, and discussing recent photos from a hunting expedition. He stated

that the Victor area was good for "not only trapping, but we hunted big game, caribou and stuff like that". He trapped there on an invitation from the owner of the trapline; however, he stated that the large game and plentiful fish make the Victor area "more of a traditional land for all of us in the community". John produces a map to talk about how the conception of traditional territories has changed over time. He stated:

> Looking at this area, this is the land of the Nishnawbe Aski area. When you look at this it's all open area, there's nothing, no number, no trap line numbers. That's how the land was, the land for the Omushkegowuk as well as the NAN territory...Because it was more like a traditional land based in that area because we were all a nation at one time (John Matatawabin).

In comparison to the wide area comprising the entirety of the Nishnawbe Aski Nation represented in his first map, he shows a map of the area divided up into numbered trap lines. John explained:

> It came in the mid 40's, I guess, when the old Lands and Forests people were as we know the Ministry of Natural Resources today, they designated a number to each trapper, and you see a pattern of numbers where each trapper was assigned to be as a traditional hunting ground or trapping ground. And therefore they created complications for some people where they said that you are in my land because you took that beaver, or you took your catch from my land. The relationship was not as good as it was at one time (John Matatawabin).

John believed government interference in creating the trap line system was a cause of infighting amongst the Cree, and divided them as a nation and introduced the notion of private property. It was not long after the trap line system was imposed, however, that trap lines began to be abandoned. John noted the "54 formula" that required children to be in school in order to receive social assistance as when many began to stay in the community full time. The 1954 social assistance funding was specifically intended to

entice Aboriginal peoples to leave their life on the land and settle in communities. This change at the time of the 1954 formula was noted by several of those interviewed, as well as the challenges they faced in the change to community life. Attawapiskat elder Gabriel Fireman noted:

> I guess it impacted us when the governments came in here with their formula, the 1954 formula came in. Because Indian children were wanting to go to school, and if they don't go to school they take that family allowance away from you; I guess that's what made us stay in the community (Gabriel Fireman).

Gabriel noted as well that this was the time when trap lines were abandoned, as he stated:

> When that 1965 agreement came in, I see that there is a benefit for us people to live in the community, and most people I guess that's when they started to pull away from their trap lines. 1965 and nobody hardly went back for the full year. They went out for a couple of weeks and a couple of months, but to live off the land the way we did in the past, that changed (Gabriel Fireman).

As a result of the move into community life, the relationship with the land and the knowledge that comes from that relationship underwent significant change. Gabriel Fireman stated:

> When I talk about Traditional Knowledge for me, when I was growing up I lived off the land and I grew up with the land, and I was taught to live off the land. But today it's very different. I still carry my Traditional Knowledge with me as an elder, but my generation kind of grew up in the community orientation, therefore they don't practice the way that I had practiced in the past. Maybe they go out seasonal, whereas compared to me ten months out of the year living off the land...Today, I go and look and hunt in the store, it's already made. As for me in the past when I was just a youngster, I went out on the land and cut the tree. And this is where I start, to build my snowshoes (Gabriel Fireman).

Gabriel recognized the move into community life has had a profound effect on the way of life for the Attawapiskat Cree. Traditional Knowledge can appear to be of little use to

younger members who have only experienced community life, and this has become a source of friction in the First Nation community. Elder John Mattinas discussed the relative ease of community life compared to living off the land:

> When I talk about Traditional Knowledge, I talk about living off the land, and I take everything off the land. Whereas today, I can't say I use all that Traditional Knowledge. When I get up I just have to turn around and put the switch on and the light comes on. When I want heat I just have to turn the heat on, that's all (John Mattinas).

The contrast of community conveniences to life on the land is also noted by Theresa Hookimaw. She stated, "in my time it was really a harsh life because everything was done by hand...and nowadays one wants to stay in a vehicle for most of every move" (Theresa Hookimaw). Theresa sees life in the community as a fundamental change to the way of life she was born into. She stated:

> I know my grandchildren and the youth generation will never go back to the land the way we lived like that. The traditional way of life will never make a comeback because they are already going on another way of life. That's the community way of life that is totally on track with the European way of life (Theresa Hookimaw).

The conveniences of community life have made daily tasks much easier. It has also provided security from hunger that plagued the Cree before moving into communities. James Jacasum stated that he and his family settled in Moosonee in the late 1940s as life on the land had become very difficult:

> My father, he thought about the hard times that he had, the hard times getting food. He always told me that when he was raising us up that sometimes I would go out and come back with nothing...My father talked about how sometimes it gets so bad that some people starved because of the food, the wildlife so scarce around the area. I guess some people wanted to come for supplies in Attawapiskat and they died on the road, on the trails they were

> so bad. So I think that's where he made his decision to take his sons out, because he didn't want us to have that kind of problem (James Jacasum).

For those faced with hunger or starvation there would have been little choice but to remain in the communities.

Although the Cree of Attawapiskat may never return to life on the land as it was in the past, traditional practices and Traditional Knowledge remain central to the community. The move into community life has been a recent occurrence, and many Elders were raised on the land. Hunting continues to be integral to the First Nation, as demonstrated by the spring goose hunt that involves the entire community. Brian Nakogee, who is an education councillor for the education authority in Attawapiskat, argued that despite Traditional Knowledge remaining deeply ingrained in the community today, "it is barely addressed" in the school system. He stated Traditional Knowledge could be further strengthened if it was made part of the curriculum. Brian pointed out that it would be beneficial for students to learn necessary survival skills in order to safely go out on the land. This would also assist in maintaining the Cree's relationship with the land, and provide for education grounded in their culture and relevant to their way of life. John Matatawabin noted the dangers of going out on the land unprepared, and discussed several tragic accidents that occurred when the advice of elders was not heeded. The formal education system is a barrier to a traditional education that often ignores the realities of life in Attawapiskat.

John Mattinas suggested that for Traditional Knowledge to be maintained, it must be in use, and that life in the community has eroded its everyday practice. However,

John did see Traditional Knowledge as relevant to contemporary life, and saw the values it can teach as important:

> I know part of our Traditional Knowledge is gone, it's not like the way it used to be. But we still maintain traditional pursuits, like we hunt, we trap, we go out to fish. At least we have that thing connected to the land a little bit, and we keep it that way. And I maintain the land as it is, you know, you don't just litter all over the place. That's something we could, we used to teach in the community for our youth (John Mattinas).

Thus, John suggested that elders need to be involved in the education of youth in the community, and that for traditional Knowledge to be imparted in a meaningful way, part of that education must be on the land, learned in traditional ways. The way in which one learns, John stated:

> Was a way of life in the old days. You have to watch your parents, what it is they do, and your grandparents. They take you out and you are always seeing everything that they do, you know, way of life. There are certain things that the kids are not allowed to see, we know how to do away with that, but the teaching part of it, even a little boy stands up and watches his Mom or Dad do things and they learn from that. That's how I gained my knowledge, by watching and learning what they do. I didn't have to put it down on paper (John Mattinas).

Thus education is not a formal process separated from everyday life, but the way of life itself. Jorge Hookimaw discussed how he learned in traditional ways:

> Traditional Knowledge for me is the way I grew up off the land...Growing up I spent a majority of my time in the bush with my family. So anything I did, I wasn't a smart kid, I just seemed to learn real fast and by listening, by hands on training from my parents (Jorge Hookimaw).

Jorge noted that although he started off at a disadvantage in the formal education system, he was able to turn his traditional education into strength in the formal system:

> I couldn't speak English in grade 3, I couldn't even read...By the time I was thirteen I was reading novels, by the time I was fourteen I was reading any kind of literature I could find on what's going on in the world. And that's how I excelled, by self, self-taught, self-motivation (Jorge Hookimaw).

Thus, Jorge saw himself as "a person who can go back and forth" from traditional Cree ways of life and the way of life formal education conveys. As he stated, out of necessity he has learned to "adapt to change as well as keep the old Traditional Knowledge that was passed on to me from the wisdom of the Elders" (Jorge Hookimaw).

While the Victor Project may be the first major mining development in the Mushkegowuk region, signs of its coming have long been in evidence to the Cree. John Mattinas talked of prospectors coming to Attawapiskat as far back as 1937, and John Matatawabin recalled a mine developer meeting with Chief and Council in the 1960s who promised to give the community half of whatever he found. Theresa Hookimaw mentioned the prophecies about future development that she heard as a child. She stated:

> To me development is nothing new because in the old days as I was growing up as a child, my late grandmother used to tell us the story that she predicted someday a stranger would come to this surrounding and make money out of the land. She talked about how they would make a big hole and get the resources from there. She used to tell us the stories that we are sitting on viable land that we don't know, that someone will come and make a value out of it (Theresa Hookimaw).

The Omuskegowuk Cree are aware of how mining developments have continually pushed further north, and it must have seemed inevitable that mining or some other form of development would intrude into their territory. They also know how devastating these developments can be on the Aboriginal peoples of the area, and how it can harm the environment and disrupt traditional activities.

Effects of the Victor Project

While the Victor environmental assessment sets out to examine potential impacts of the project, Attawapiskat residents are already experiencing impacts from the advanced exploration stage of the future mine site. Attawapiskat elder Annabella Iahtail stated:

> The Attawapiskat River is a highway, it is like your highway. It is a way of getting out to places for a Native person. And along the river there are fish spawning areas, as well there are other rivers that branch off from the area and each river has fish spawning in each one of them...And where Victor is, it's more like a hunting area, it was more like a hangout for people who rely on caribou and moose, and that's been blocked off already, you can't go there anymore. And that impact is going to be a big impact in the future as well (Annabella Iahtail).

In addition to the good hunting area now occupied by the Victor site, Annabella was worried there will be further restrictions placed on where they can go in the vicinity of Victor. As she stated:

> I know De Beers is talking about zoning where Victor is right now, and there might be some zoning in the main river as well the Nayshkootayaow River. These are two rivers that people use to rely on as a way to get access to places. And right now we know they are talking about that, to zone the main river. How do we get access to go further? (Annabella Iahtail)

Annabella observed that there are reduced numbers of some fish species in recent times. She stated:

> Since Victor has been involved and the activities that are going on, we notice we can hardly get any sturgeon here (Attawapiskat). And the kind of fish, like the catfish we call it, they hardly get those downriver, but the further up you go we expect there are some (Annabella Iahtail).

Annabella speculated that the helicopters that are now frequent between Attawapiskat and the Victor site are playing a role in the fish disappearance. She stated that the only way to minimize this impact is to avoid traffic on the Attawapiskat River and known spawning grounds, however, traffic along river will increase substantially during construction.

Many people in the community made the same analogy to the Attawapiskat as a highway for the Cree. Attawapiskat elder Paul Mattinas stated:

> The Attawapiskat River is the only highway as compared to your area, it's the main highway for us when we travel...Those people that personally use the land at Victor, they are already impacted...And although they allow us to travel past Victor, its just like when you are out traveling and you get a custom check. That's the kind of fear we've never had before (Paul Mattinas).

As Paul noted, people feel intimidated or disturbed by the presence of De Beers in the heart of their traditional territory on their most important travel route. John Matatawabin stated that the buffer zone around Victor is already impacting the community, and he was apprehensive of any restrictions on his people's ability to hunt. When the Ontario Ministry of Natural Resources (MNR) made a bird sanctuary on Akimiski Island, allowing only a two-week hunt, the community was very upset. John noted that when an MNR official was asked what would happen if they hunted past the two week limit, the official told the community "we will use every force that we are mandated to do, even shoot the hunter if we have to" (John Matatawabin). John stated, "it was a shock to the community" that such drastic measures might be taken against hunters in their own territory. As such, the buffer zone around the Victor site where hunting is banned is viewed as part of the larger infringement on traditional ways of life, and some feel very

threatened by the development. In addition, the possibility of more development in the area was not effectively dealt with in the environmental assessment. As John stated,

> There are going to be a lot of other developers or another development coming into this area that will impact us, all of us in the community. And that one, the proponent right now, didn't listen to us, said we will talk about it when the day comes. And the reason we wanted to talk about it is that we wanted to prepare ourselves a lot more, years ahead. That's what I see we didn't really focus on and what we could have done in the first round in this Traditional Study (John Matatawabin).

Members of the community envisioned the environmental assessment process as a way to adapt to what many saw as the inevitability of development, in ways that benefited the community and ensure their continued connection with the land. Minimizing the environmental impact of the Victor Project is seen as a precondition for this to happen, but that in itself is only part of what the community hoped to achieve.

Many community members who were interviewed identified water as the most specific environmental aspect they were concerned about. There is deep anxiety that if the water becomes contaminated as a result of Victor's activities the community will become unviable. As Paul Mattinas stated:

> My main concern right there at number one would be water quality, and the reason why I say that is every human needs water, and every species of animal who are migratory, and the land needs water for the plants (Paul Mattinas).

Paul stated that his concern rises from what he has heard from the Cree and Inuit in northern Quebec in their experience with hydroelectric development. In particular, he discussed an incident when about 10,000 caribou were drowned in 1984 at a crossing on the Caniapiscau River following an event largely blamed on water management decisions of Hydro Quebec in relation to the La Grande hydroelectric complex. Paul felt that

disasters such as this could be avoided if developers, governments and First Nations peoples "work as a team" in considering project decisions and their potential impacts throughout the life of the project.

John Matatawabin voiced similar concerns about water; however, he focused more on potential contaminants, particularly in the long term after De Beers has left. He stated, "anything that does happen may drain into the river and may affect the river system and will affect everything that is in the water as well as what is on the land" (John Matatawabin). He was sceptical of De Beers' plans to dewater the mine pit, which will require pumping water extracted from wells surrounding and within the open pit into the Attawapiskat River. John was also concerned about what may leach from the mine site into the Attawapiskat River. He noted that near the Victor site, the Attawapiskat "is like a walled cliff...and you can tell that there is limestone and it may drain out from that area" (John Matatawabin). Issues concerning the hydrologic conditions of the muskeg environment have proved the biggest technical engineering challenge for the Victor site, and its impacts remain uncertian.

Greg Shisheesh noted that many in the community already feel that water quality has been impacted. He expressed great mistrust that De Beers and the many other exploration companies working in the area are upfront about environmental damage incurred in the course of their operations. Greg stated,

> The young people (from Attawapiskat) that work there (Victor) that I am still in contact with that are at the camp saw wildlife destroyed and they want to report it, but somehow they are told to hush up about the situation...They are told not to say anything or they are going to lose their job (Greg Shisheesh).

He also noted that helicopters and airplanes are disturbing both the animals and the hunters out on the land. Former Chief Theresa Hall also expressed the fear De Beers would retaliate against employees for stating anything that might reflect poorly on the company. She stated that those who work for De Beers have to be very careful about what they say, something she believed the company was actively monitoring (interview, August 29, 2006). As well, Theresa accused De Beers of turning young employees and potential recruits against Elders and the First Nations' leadership who might have raised objections to the mine development (interview, August 29, 2006). This raises the question of whether the informal discourse with employees and field assistants was more important to De Beers in providing information they could exploit about the community than it was for purposes of Traditional Knowledge collection.

The sentiment that De Beers and other exploration companies cannot be trusted to be their own environmental monitors was common among those interviewed. Annabella Iahtail recalled an incident when a bear was causing a nuisance at the Victor site. She stated:

> They came to the community and asked for three people to get rid of the bear, and the three people went up and shot the bear. Once they shot it they sent the community members back to the community without even consulting the First Nation about what to do with the bear. They just dug a hole and threw it in there. If they really respected the Traditional Knowledge Study they would have come back to the community and asked, what do you want to do with the bear (Annabella Iahtail)?

Annabella argued that the Victor people should have known the bear would be useful to the community if they paid any attention to the TEK Study. Disposing of the bear without consulting with the community was seen as disregard for their opinion.

Elder James Jacasum, who has extensive experience working in the mining industry, felt that some wildlife may move away temporarily, but they will eventually return. He stated:

> A lot of people think that it (mining activity) chases away the wildlife from the area, but for me, what I am aware of, is it doesn't really keep them away for a long time. They will come back when they get used to the noise (James Jacasum).

He noted that moose are often seen around the city of Timmins and that recent moose hunting expeditions near Attawapiskat have been successful. James' concern was only that the mine is properly monitored so that pollutants don't enter the river and any spills are quickly cleaned up. Theresa Hookimaw expressed the belief as well that large game animals will move away at first, but will eventually return when they become familiar with the mining activity. However, the area occupied by the Victor mine site and the buffer zone surrounding the site represent a substantial area where wildlife in an important hunting ground will be driven away for at least the duration of the project.

There was much concern expressed about what impacts and benefits the mine will have on the community. As several people noted, De Beers made grand assurances to the community about the benefits they would see while protecting the environment. John Mattinas stated that when De Beers' consultants came in to do the environmental assessment "he told us he's going to have a thick book that will give us assurance that nothing will happen". However, there was much concern for how employment of Attawapiskat First Nation members will affect the community. Jorge Hookimaw stated his biggest concern for the project was the social impact it will have on the community. He stated that there has already been a noticeable increase in the amount of illegal drugs

in the community as a result of the Victor Project (Jorge Hookimaw). Nevertheless, Jorge saw the Project as decreasing the isolation and opening up employment and entrepreneurship opportunities for the community. He stated that many in the community were "upgrading their heavy equipment skills because they want to work there, and there is an entrepreneur person here that helps out people set up businesses (Jorge Hookimaw). Jorge noted wide support for the project among Attawapiskat's younger residents as many hope to either work at the mine, or in the several spin off employment opportunities Victor is expected to generate. Jorge believed that it is the "steady stream of graduates through the high school system that will benefit from (Victor)". However, David Okimaw, Employment Coordinator for De Beers and a member of the community, stated that most will have to start off as labourers and apprentices, and training to achieve higher level jobs can take as much as nine years (interview, October 27, 2006).

The kinds of benefits the Victor Project will deliver appear to have pit youth against Elder. The promises of wage employment are irresistible to youth who see little economic opportunity in Attawapiskat. Elders, on the other hand, take a much more cautious approach. John Matatawabin warned of placing too much emphasis on potential wages to be earned at Victor. He stated:

> I know money comes first in life nowadays, but after the money is gone the land will still be there, and this is something that I try to bring across to the youth. You know your pocket will be empty before De Beers is gone because he's only going to be there for the lifetime of the mine. There's no insurance or security for you in the future (John Matatawabin).

John Mattinas was concerned about some of the harmful effects that a sudden influx of money can bring:

> I know there are going to be changes, and nowadays money is good to have if you use it in a good way. There is also the abuse way of life. We know the things that come with it, like alcohol and drugs and family breakdowns and stuff like that. We know it's going to happen, it's going to be happening here in Attawapiskat. It happens in any other development and it's going to happen here as well.

There was hope the Victor Project will bring much needed employment and housing, and allow for improvements to health care and education, and these issues were discussed in community consultations on socio-economic issues. However, they were largely dealt with in the IBA, as De Beers was successful in limiting socio-economic investigation in the environmental assessment. The cautious approach of Elders has led some who want to see Victor proceed as quickly as possible to claim that they are in the way of development. Greg Shisheesh noted how people's immediate needs and belief they would receive quick financial compensation from De Beers, dictated their consent to the project. He believes the position of Elders in the community has weakened as people look to quick economic gain from mining interests in the region. Greg pointed to less representation of Elders on Council as a sign that they are being bypassed in decisions about Victor. He stated:

> According to my knowledge there's only one Elder in Council now, and most of the time that Elder is out voted with his knowledge...I talked to the young people that were here (James Bay Education and Training Office) the other day. Greg, they said, don't you know the Elders lie? For me, that's disrespect, I don't look at them in that way. So Elders are not listened to, they're not listened to (Greg Shisheesh).

As the position of Elders in the community has been undermined by the promise of immediate economic benefits, the professed interest in Traditional Knowledge by De

Beers rings hollow. Traditional Knowledge appears instead to be the major source of resistance to De Beers development plans.

The Victor Environmental Assessment Process

The environmental assessment process posed several challenges for the community of Attawapiskat regarding effective participation and the inclusion of Traditional Knowledge. The Traditional Knowledge Study was a particular source of conflict between Attawapiskat First Nation priorities, and those of De Beers and the federal government. Most of the elders interviewed who participated in the Traditional Knowledge Study commented that the study was rushed and therefore incomplete. Gabriel Fireman stated, "some of the things that needed to be done were not done because the Study was kind of a rush, a rush thing". He wished the costs of living in the north were examined as part of the TEK Study, and the costs of maintaining traditional practices such as hunting. As the presence of Victor was forcing hunters to travel further past the mine site, and limiting the ability to do day trips up the Attawapiskat, Gaberial argued the time and expense to hunt have increased and needed to be examined in the Study. Annabella Iahtail, as well, argued the TEK study was rushed and incomplete. She stated:

> I feel the Study was not really fully done because I felt that there were some things that were not addressed that needed to be addressed. Because when you talk about the environment, you need to include everything no matter what, what's out there, like the small plants, stuff like that. The old people use that for

> medication purposes. These things were not included that much when we talked because the consultant was kind of reluctant to get that information, not knowing what was important (Annabella Iahtail).

Annabella noted that the TEK Study was intended to provide a basis for compensation to the First Nation to be negotiated in the IBA. By not including certain kinds of information she feels compensation may be undervalued.

The TEK Study was also criticized for being conducted at too early a stage in the Victor development. John Matatawabin stated, "there were some things that we never addressed due to the early stages of this development", and John Mattinas stated, I felt that we were asked too early at this stage of this development, knowing that there will be some impacts in the long term". De Beers had circulated their project proposal in the spring before interviews for the TEK Study were conducted in the fall of 2003; however, as this was the first experience with mining community members were very unclear as to what De Beers intended and the implications of the mine were.

Pressure on the community to complete the study and the resistance of consultants to hear certain kinds of information led some to believe De Beers was imposing their own agenda on the process with little regard for truly engaging with Traditional Knowledge. Brian Nakogee described the environmental assessment process as one "dominated by the proponent's consultative methods", and he "would have preferred some open panel consultation (that included) experts as well as Traditional Knowledge". He felt the "Native perspective" represented by Traditional Knowledge was "overridden" by scientific experts, and that the process for incorporating Traditional Knowledge was "foreign" to the elders who participated. Thus, the community not only had to learn

about mining and its potential impacts on the environment and the community, they also had to learn how to engage with the environmental assessment process. They also had to communicate their knowledge through research procedures over which they had little control.

Further complicating the process was disrespect perceived by community members on the part of consultants. Annabella Iahtail stated, "in some ways it's like they just toy around with us". She was suspicious of their sincerity, as was former Chief, Theresa Hall. Theresa felt that the AMEC people were "almost laughing at the people" as they "always had a smirk on their faces". Theresa stated, "they did not take the process seriously, and they had the attitude that the government is with us and you are not going to win". John Matatawabin discussed problems working in the field with De Beers and AMEC people. He stated:

> I go out there when they want someone with Traditional Knowledge from the community, and then when we go out and tell them something, those young consultants, sometimes they don't care. I've got a feeling sometimes that they don't want to listen to us…Since we go out as an elder sometimes without proper translations, you just work with the consultant and I'm on my own and not able to communicate with this person (John Matatawabin).

This description of the relationship between local peoples and outside experts differs greatly from De Beers' depiction of scientists happily listening to and incorporating the suggestions of Attawapiskat Cree participants. What many of those interviewed seemed to suggest is that De Beers and those working on their behalf were interested in Traditional Knowledge only because they were mandated to do so. This suggests De Beers' engagement with Traditional Knowledge was for appearance's sake with little substantive consideration. The scepticism that they were taken seriously and their

knowledge valued was fuelled by a lack of transparency in decision-making. The community had to take it on good faith that their concerns did actually influence decisions. Paul stated:

> They meet somewhere down south and we're not involved...We're not sure if we are included when they meet, government to government and the proponent, if they really tabled our, the issues we talked about and the concerns we have with the TEK Study as well as the environmental assessment (Paul Mattinas).

It is not surprising that apathy would develop among community members towards participating with the environmental assessment process. There were great demands on time attending meetings, learning about the issues, and participating in studies, with little direct influence on decision-making. It was clear that many interpreted De Beers's goal in consulting with the community and engaging with Traditional Knowledge as simply fulfilling regulatory requirements. The substance of those consultations, much less the course of action Traditional Knowledge might inform, appeared to be of little concern to the proponent, its consultants, and government regulators. Community consultation and participation appeared to be for the purpose of placating, rather than addressing, concerns in the community.

The community was forced to learn about the processes and issues involved in an environmental assessment of a major mining development, as represented by Victor. On the other hand, it is the proponent and their consultant's business to navigate these issues to their favour, and they are inextricably connected to the levers of government to make it happen. Many in the community are aware of the power imbalance they faced, and believe De Beers utilized this to their full advantage. Brian acknowledged the difficult negotiating position the Chief and Council were in, but questioned how well they

challenged De Beers' assertions. He argued that effective participation in the environmental assessment required community members to do more than attend meetings. Brian stated, "not only as a community, but as an individual," you need to "do some research on your own and speak with other people affected in other communities and the experiences they had to go through" (Brian Nakogee). Some did note that they had discussions with other First Nations, particularly Cree peoples in Quebec, and representatives from environmental NGO Mining Watch visited the community to discuss issues in which the community should be wary. However, the experience of similar developments in other communities was not scrutinized in the environmental assessment. Brian feels De Beers was able to exploit the poverty in Attawapiskat, stating:

> Because most of the people in the community are destitute or they are unemployed, and they will do anything...they see this as a savior for them to get out of the slump or some sort of a means to an end. I think they took advantage of (the community) once they knew they could do that. They've been here often enough and I think maybe they are just basically observing our reaction to the whole situation, and once they knew how they could do it, then I think they put us on the support and pockets of a few people (Brian Nakogee).

Brian does not seem to be surprised that De Beers might exploit any tactic that will result in the best deal for themselves, and it would be naive to think differently.

It was noted by several people that the authority of Elders in the community appears to have weakened throughout the environmental assessment process. While Elders were called on early in the process when baseline studies and the TEK Study were completed, now that those studies are complete Elders are called on less often. John Mattinas noted that Elders were active early on in the process when establishing the

Steering Committee to address issues related to Victor. This was also when many of the studies related to the environmental assessment were completed. However, John stated that they are no longer regularly consulted:

> I know that people come in here sometimes and they don't bother the elders to talk, they prefer to talk to other people...The people that work up there (at Victor), they've bypassed us (John Mattinas).

John noted that when prospectors first came to the area, they would come to the community to ask for guides to take them out on the land. As such, the Elders and others who are knowledgeable about the land have been involved with mining and exploration activities from the start. John would like to see "an ongoing working relationship with the Elders so they could be there during the life of this mine".

The attempt by Attawapiskat community members to ensure they maintain their connection with their land in the face of the Victor mine development is recognized as another challenge in their relationship with the Canadian state. Thus, their right to continue with traditional practices and have a significant say in any development decisions is an extension of their treaty relationship with the Canadian government. However, Canada's record in delivering on its promises that stem from treaties with Aboriginal peoples is weak. Chief Mike Carpenter noted that the federal authorities refused to discuss treaty issues in conjunction with the environmental assessment (interview, August 30, 2006). The benefits predicted to come from the Victor Project appeared to some as yet another promise to Aboriginal peoples that is unlikely to be realized. Thus, much doubt was expressed that the attention to Aboriginal peoples and

their Traditional Knowledge will benefit the community in the end. Theresa Hookimaw questioned the federal government's interest in Traditional Knowledge, stating:

> It's just the way the government operates. They did it once before when they brought a treaty in and nothing happened for a hundred years, and again, its just paperwork again. When the treaty commissioners came in they said to our forefathers, we will do this for you, the land will be kept as it is. And for the last hundred years we have never witnessed or seen anything that was promised (Theresa Hookimaw).

Theresa pointed to the poverty that exists where De Beers operates in Africa, and she was worried that the poor conditions she has seen televised will be transported to Attawapiskat. De Beers' implication in the colonial legacy of the African continent is an issue that is never addressed throughout the environmental assessment process. John Mattinas expressed the same doubt that Victor will deliver a substantially better life for the Cree. He stated:

> I wonder sometimes, like when the government came to our territory when we first had contact with them, like when I think about the treaties, the promises that were written and the contents when my forefathers were here at the time. And most of them are long gone and they never seen anything, and still today we're getting to the age where I'm an old retired man. I haven't seen what was promised, and I can say to myself, I'll probably never see what they have promised. So it's the same with Victor. I don't think I will really see anything out of that.

There is also the fear that by cooperating with De Beers the precedent is now set for more development in the James Bay region. John Matatawabin stated that since the IBA was signed, "more junior companies come into our area". He noted that, "we opened the door for them, and this is happening in the whole James Bay area" (John Matatawabin). As John elaborated, it is the move from living on the land to living in the

community that has left the community with little option but to accept the Victor development. He stated:

> As a Native person I am connected with the land, I am so close to it. I know that life, as I travel, as I journey in this world, that time changes. Because I was once a trapper and I lived off the land, but now today I am community oriented, I have to seek a job and employment so I can find my means of income. I know how the developer came to my community, he offered me some compensation, he offered me some benefits, and the community went for it because we are a part of a community now and the community way of life in this modern world. But if I was practicing my way, if we were living off the land we would not accept that, we would not have accepted that (John Matatawabin).

Traditional Knowledge, and the life on the land that it comes from, is antithetical to ways of life dependent on development projects such as Victor. The Cree when living full time on the land would have had little use for any of the benefits a diamond mine would bring. Thus the way for the Victor development began to be paved when Treaty 9 was negotiated, and later when the Cree and other Aboriginal peoples were coerced into impoverished community life on the reserve. The imposition of an educational system that divorced children from their parents and traditional ways of life, and still stands in the way of learning Traditional Knowledge, furthered this process in an attempt to eradicate Indigenous ways. Government policies and regulations have often been for the purpose of colonizing Indigenous peoples and their lands, thus clearing the way for development that is of little benefit to Indigenous peoples themselves. The Cree of Attawapiskat are rightly suspicious that current government policies and regulations will change past patterns.

As Traditional Knowledge represents the knowledge of a way of life vastly different from what developers promise, it stands as a challenge to those who are the

proponents of development. Thus one must consider that by including Traditional Knowledge in the environmental assessment process, a process that is intended to improve project design and not to question the appropriateness of the project, dissent in communities is contained. Incorporating Traditional Knowledge may simply be another management tool of federal and provincial governments, an intellectual colonization that attempts to absorb the knowledge of Indigenous peoples into bureaucratic processes. De Beers can claim, as they do, that they have extensively consulted affected communities and incorporated Traditional Knowledge, and therefore have fulfilled their obligations to Aboriginal communities. As Greg Shisheesh stated, "all the meetings we have gone through are good, it's good for De Beers".

6. Conclusions

The coming of the diamond mining industry to the Attawapiskat Cree's traditional territories is meet with ambivalence by many community members. Economic benefits in the form of jobs, spin-off industries, and compensation for resource extraction is much needed by the First Nation as very high unemployment and a growing population characterize the community. The mine also provided an opportunity to address problems in the community, such as poor housing and insufficient health care, attributed to years of government neglect. However, there was a great deal of apprehension about how the mine might impact the environment and their community. Many voiced worries that the mine could pollute the Attawapiskat River, fundamental to the lives and livelihood of the Attawapiskat Cree. There was also great concern over how the mine would affect traditional activities and the animal species on which the community depends. Participating in the environmental assessment process was the means by which the First Nation attempted to reconcile the need for economic development with the need to protect their way of life.

Central to this end was the inclusion of Traditional Knowledge in the Victor assessment. This would allow for the Attawapiskat Cree to interpret their environment on their own terms, and to be involved in discussions to ensure impacts were minimized. The incorporation of Traditional Knowledge in northern environmental assessments is becoming the norm, with roots reaching back at least as far as the Berger Inquiry into the

proposed Mackenzie Valley Pipeline. The participation of Aboriginal peoples and the inclusion of Traditional Knowledge in environmental assessment processes is part of what RCAP described as the stage of "renewal and renegotiation" (1996) in which Aboriginal peoples have demanded a say in decisions that affect their communities and ways of life. Reaction to the release of the federal government's 1969 "White Paper" on Indian Policy signalled the refusal of Aboriginal peoples to accept colonial policies of assimilation. Testimony at the Berger Commission and the refusal of Cree and Inuit peoples to submit to Hydro Quebec's development plans were landmark expressions in the reassertion of Aboriginal peoples political power. Traditional Knowledge underlies the cultural autonomy of Aboriginal peoples, and it is a powerful source of resistance to colonial aspirations.

The literature on Traditional Knowledge and its relationship with environmental assessment revealed an uneasy partnership facing many obstacles. While Traditional Knowledge is widely recognised as a legitimate and valuable source of knowledge to address contemporary problems, its operationalization in regulatory processes has been problematic. Much of this stems from the subservient position it is afforded relative to the authority of science. Traditional Knowledge is often only accepted in terms that are easily reconciled with scientific research, while its larger context and relevance to Indigenous peoples is ignored. This has meant empirical observations are usually incorporated into studies, but Indigenous interpretations and meanings are not. In what follows, I will discuss my conclusions on the effectiveness of the environmental assessment process in addressing the concerns of Attawapiskat First Nation. This will entail an examination of community participation and consultation on issues arising from

the Victor mine proposal. The outcomes of integrating Traditional Knowledge will be further examined, including the relationship between Elders, scientists, consultants, and bureaucrats. I will finish with a discussion of colonization/decolonization issues that were contested in the Victor mine proposal and the environmental assessment process.

Community Participation in the Victor Environmental Assessment

The issue of Aboriginal and treaty rights, despite numerous requests from the Attawapiskat community, was never addressed at any stage in the Victor mine development. As the examples of the Mackenzie Valley and Northern Quebec demonstrated, in order to gain access to resources the federal government was obliged to negotiate land claims that formalized some level of resource management for Indigenous populations. In these cases previous treaties did not cover the regions where developments were proposed, while Treaty 9 encompasses the Attawapiskat Cree's traditional territory. However, the interpretation of that treaty from the understanding of Indigenous peoples, when compared to that of the federal government, is the subject of considerable dispute. It is ironic that the participation of Aboriginal peoples in environmental assessments is in a large part due to obligations stemming from Aboriginal and treaty rights. The federal and provincial government's refusal to discuss the Aboriginal and treaty rights of Attawapiskat First Nation, which is the foundation of their legal claim to be involved in development decisions, undermined the community's ability to protect their interests. Without a firm agreement on how their rights applied to the

Victor Project, the Attawapiskat community was in a weak negotiating position, as effectively they had no control over any aspect of the proposed development. Thus, the community was forced to negotiate an Impact Benefit Agreement with De Beers and to participate in the Victor mine's environmental assessment, knowing they could not veto any undesirable aspects.

The *Haida and Taku River* (2004) Supreme Court decision stated that the scope of government's duty to consult with Aboriginal peoples and accommodate their interests is proportionate to asserted, but not necessarily proven, Aboriginal rights and title, and to the potential for actions to have an adverse affect on the rights and title claimed. As treaty issues and the Aboriginal rights of Attawapiskat First Nation, and how Victor might have an impact on their rights, was never discussed, the scope of the government's duty to consult was never established. Rather than addressing these issues, the Victor environmental assessment deflects discussion of treaty and Aboriginal rights as government officials and De Beers representatives claim it is beyond the requirements on the CEAA. The choice of the federal government to have Natural Resources Canada, rather than the Department of Indian and Northern Affairs, to be the lead authority in the environmental assessment, likely further distanced discussions from Aboriginal and treaty rights in favour of resource development issues.

Further diminishing the community of Attawapiskat's ability to effectively participate was their unfamiliarity with the complex issues involved in the Victor proposal and the bureaucratic process of environmental assessment. The implications of diamond mining for the community, the environment, and the Cree way of life had to be investigated as the exploration activities of De Beers and numerous other companies

intensified. This problem was clearly exacerbated by De Beers' continual pressure to speed up the environmental process. The threat of abandoning the project, or of bypassing the First Nation altogether in discussions of the proposed mine, was a constant source of anxiety for the Attawapiskat community. This pressure compelled Attawapiskat First Nation to agree to release the Traditional Knowledge Study with the belief that further Traditional Knowledge investigations would occur, particularly on the topic of mitigation and monitoring.

Early community meetings were largely technical presentations describing the project and permitting processes. Community members could not respond effectively at these presentations as they were still attempting to understand aspects and issues related to mining. While these presentations may be useful for a development proponent to introduce a project proposal to a community, they should not be considered part of the consultation process. Communities need time to educate themselves before consultations can begin, especially considering the radical intrusion into Indigenous territories the Victor Mine represents. The nature of the issues discussed required the community to depend heavily on consultants from outside the community in order to assess scientific research and descriptions of mining processes. Much of the funding for participation does not stay in the community as it is largely spent on consultants. While consultants hired by Attawapiskat First Nation were vested in their client's interests, they did not offer a perspective unique to the community. They engaged with technical and scientific information in their reviews, as they were hired to do, on the same terms as De Beers and their consultants. The hiring of consultants for this purpose is a necessary addendum to what communities have to offer in the environmental process; however, it should not

form the essence of a community's participation. Therefore areas where the Attawapiskat First Nation community could participate more directly, namely through Traditional Knowledge and socio-economic study, needed to be substantial components of the environmental assessment. While the *Guidelines* appeared to recognize this, the limitation on socio-economic assessment reduced community participation in the Victor environmental assessment.

A major problem with the Victor environmental assessment was that many of the Mushkegowuk First Nations communities perceived it as occurring after the fact. This again speaks to the intrusiveness of mining exploration in the region. De Beers advanced exploration was significant enough to be considered a mining operation by local peoples. It was during the advanced exploration phase leading up to the onset of the environmental assessment process that De Beers and their consultants completed the majority of the research employed in the assessment. This certainly fuelled the perception that the mine was already a done deal, and likely contributed to poor turnouts to some of the community meetings. It also meant participating in research projects, particularly the Traditional Knowledge Study and social impact assessment meetings and workshops, without any clear guidelines as to how they would be employed in the Comprehensive Study. De Beers' release of the Comprehensive Study after merely a week following the release of the final *Guidelines*, and their reluctance to conduct further research requested by Attawapiskat First Nation, meant that the Attawapiskat community's participation in research was largely over before the environmental assessment began. This also reduced the chance any oppositional alliance between First Nations and environmental organizations would form. The remote location of the project kept it out of the public eye

until the environmental assessment made it public. As much of the research was complete and many felt the mine to be inevitable by the time the environmental assessment began, the input of environmental organizations was too late in the process to have much effect. This was likely a strategic move by De Beers to keep opposition at a minimum.

Despite numerous constraints on effective public participation of Attawapiskat and other First Nations, the change from fuel shipments through Hudson and James Bay to power transmission lines as the energy source for the Victor mine, was a major victory. The change created employment constructing the transmission corridor, and provides power infrastructure beneficial to the Mushkegowuk First Nations communities. Community consultations raised concerns over the fragility of the James Bay coastal environment and difficulties it would pose cleaning up a fuel spill. There would also be no long-term benefits to the region from the ocean tanker plan. This was the most visible influence community participation had on the project. Most communities in the region preferred the change, and while it required greater initial investment by De Beers, costs would not be significantly different in the long term.

The Integration of Traditional Knowledge

The most fundamental problem with the integration of Traditional Knowledge in the Victor environmental assessment was that it was De Beers and their consultants who held decision-making authority over when and how it was employed. The wishes of

Attawapiskat First Nation to determine what Traditional Knowledge was relevant and how it would be interpreted in the assessment were largely ignored. Efforts by the community to have Traditional Knowledge incorporated at all levels of the assessment were unsuccessful, as it was largely relegated to land use and wildlife surveys. Traditional Knowledge was specified in the Guidelines to be employed in examining environmental and socio-economic effects, as well as in potential mitigation and monitoring measures. However, Traditional Knowledge was not employed directly in these issues, but rather it was simply 'considered' when drafting these components of the Comprehensive Study. Traditional Knowledge was likely more influential in how it shaped the comments made by Chief and Council and community members at public meetings and workshops than it was in formal studies. At meetings with First Nations representatives and members of local communities, it was the objections raised to the plan to ship fuel through Hudson and James Bay that resulted in this part of the project being changed. Formal Traditional Knowledge studies provided further justification for the change; however the context for these studies strips them of any agency in the assessment.

Several factors contributed to the weakness of formal Traditional Knowledge collection: De Beers and their consultants oversaw the process; the Traditional Knowledge Study was conducted before participants had a clear idea of what the Victor project entailed; pressure from De Beers to conclude the Traditional Knowledge Study before Attawapiskat First Nation's members involved in implementing the study felt it was complete; it was not incorporated as an ongoing part of the assessment process; and participants often felt De Beers' consultants were condescending towards them. This last

point indicates the devalued position Traditional Knowledge, and the input of community members more generally, was granted in the environmental assessment process. Incorporation of Traditional Knowledge meant conforming to the norms of natural and social science investigation, and submitting to bureaucratic processes that are not forms of decision-making engaged by Indigenous peoples. It is in employing these norms that Traditional Knowledge is transformed from that which comes from a way of life into data useful for development proponents and governments in forming their decisions. As such, it merely fills gaps in scientific knowledge rather than challenging the assumptions of non-Indigenous environmental managers, scientists, and development proponents. It is to this end that Traditional Knowledge can be of great value to the environmental assessment process, and can protect the way of life of Indigenous peoples. Restrictions on the incorporation of Traditional Knowledge in the Victor environmental assessment assured that the ideological assumptions of development were not sufficiently challenged, and did little to protect Indigenous peoples' ways of life.

The limitation of socio-economic investigation is a clear example of how Traditional Knowledge is not fully considered in the environmental assessment process. One of the strengths attributed to Traditional Knowledge is that there is no rigid distinction between natural and social realms. The decision to exclude socio-economic information not directly related to biophysical impacts also excluded a substantial amount of Traditional Knowledge. In addition, the exclusion did away with any significant gender analysis. The lack of gender analysis, limitation on socio-economic study, and incomplete Traditional Knowledge investigations that never considered mitigation and monitoring issues meant that the final Comprehensive Study Report did not meet the

Guidelines in these areas. Despite the shortcomings in areas Attawapiskat First Nation considered vital to their effective participation and preparation for the proposed Victor mine, the federal government accepted the conclusions of the report.

The Traditional Ecological Knowledge Study (2004) conducted in Attawapiskat was believed by the First Nation's members to be the first stage in further study. The community was deceived into believing they would be able to address more substantive issues that directly related to the Victor Project at a later stage in the environmental assessment process. Regional Traditional Knowledge studies followed the same format as the Attawapiskat study, avoiding issues such as monitoring, mitigation, and assessment of effects. These studies have no bearing on project decisions, and it is left in the hands of De Beers to decide what is relevant. The invisible Traditional Knowledge that De Beers claims was garnered at community meetings, and in associations with research assistants, further divorces the people of Attawapiskat from their knowledge. Integrating Traditional Knowledge meant relinquishing control over how it was employed and interpreted in the *Comprehensive Study*. Thus, the flaws that appeared in past diamond industry environmental assessments are repeated with Victor. Features of the Ekati and Diavik assessments, such as proponent self-assessment, insufficient data collection, lack of time and resources, and community participation and Traditional Knowledge integration that was disconnected from decision-making, are problems that figured prominently with Victor as well. It appears Traditional Knowledge integration is failing Aboriginal communities, and therefore better methods of applying Traditional Knowledge to environmental assessments need to be investigated. Aboriginal communities need to be given the time and resources to conduct their own Traditional

Knowledge based studies that reflect their own priorities. A co-assessment model that directly ties communities to decision-making has the potential of making the exercise of including the Traditional Knowledge worthwhile to Indigenous peoples. However, development proponents and their governmental backers are likely to be very reluctant to relinquish any significant control over development decisions to affected communities themselves. The following recommendations would significantly improve the ability of first Nations to have meaningful control over development decisions involving their territories:

- The place of land claims, treaty and Aboriginal rights in the environmental assessment must be clarified before the process begins.
- Guidelines need to be binding so First Nations can be assured issues of primary importance will be dealt with.
- Any studies that directly involve the community, such as Traditional Knowledge studies or social impact assessment must be conducted under the direction of First Nations. While it may be necessary to hire consultants from outside local communities, they need to be responsible to First Nations, not the development proponents.
- Impact benefit agreements need to be transparent.
- Long-term local and regional planning goals need to be developed against which development proposals can be considered for their appropriateness.
- First Nations' communities need to be directly tied to decision-making. All the previous points follow from this.

The Victor Project, Environmental Assessment, and Colonization

Efforts by colonial and state governments in Canada to exploit natural resources have necessitated gaining access to Indigenous homelands. The recent diamond boom has continued this process as mining and exploration companies have entered into areas that have seen little previous industrial development. Aboriginal participation and the inclusion of Traditional Knowledge in the environmental assessment process is a way for industrial development projects to proceed in areas with a strong Indigenous presence, and as such, is similar to the earlier era of treaty making. The proponents of the Victor Project, like the treaty commissioners in the early 20th century, made promises of benefits to Indigenous communities that would allow for traditional ways of life to continue. While traditional ways of life have continued in the Mushkegowuk region, this is not because of Treaty 9, but largely in spite of it. Many in the community of Attawapiskat feel the terms of that treaty have not been honoured, and are dubious that Victor will deliver on its promises as well.

Poverty and lack of economic opportunities in Attawapiskat were a precondition for De Beers to gain support as they were able to oversell the short term and limited job opportunities Victor will offer. While many Elders expressed that they were not against the Victor development, they wanted to ensure its harmful impacts were limited. They also wanted to ensure that the community as a whole would benefit from the mine. By isolating the input of Elders to the Traditional Knowledge Study in its incomplete form, De Beers' likely limited costs and avoided more rigorous mitigation and monitoring procedures. These would have been demanded by Elders had there been further

investigation to guarantee ongoing community input in the Victor mine, and to ensure their interpretations would be heard. Limiting socio-economic study likely was for similar reasons as research would have cost time and money, may have provided Attawapiskat with greater bargaining power in the Impact Benefit Agreement negotiations, and may have placed the assumptions of the proponent and government representatives about the value of industrial development under greater scrutiny.

The strategy employed by De Beers to gain sufficient local approval for the mine appeared to include creating divisions in the community that undermined the authority of the Elders. De Beers presented the Victor Project as the route to prosperity for the community of Attawapiskat. Elders could express their opinions, but they would be forced to move out of the way of Victor. They were bypassed once De Beers felt its duty to consult was fulfilled, giving the impression their contributions constituted little more than statements on a passing way of life. Rumours of immediate compensation to residents and coercion of employees further demonstrated the perception among community members that De Beers would be able to force their agenda on the First Nation. The Mushkegowuk First Nations were also divided in the process, as communities other than Attawapiskat were not involved in IBA negotiations, and only marginally included in Traditional Knowledge studies. This led other First Nations to believe they were being shut out of benefits from the mine as De Beers focused their efforts on Attawapiskat, avoiding more extensive consultation and compensation. Attawapiskat First Nation was put in the position of ensuring they could maximize economic benefits from the mine at the expense of a more united approach to dealing with De Beers. De Beers was also successful in keeping an alliance with environmental

organizations from forming by conducting most of the consultation and research before the comprehensive study was announced. As demonstrated in the examples of the Mackenzie Valley Pipeline and the Great Whale Phase of the James Bay Hydroelectric Project, a united front of Aboriginal and environmental organizations can provide formidable opposition. Thus, in gaining federal approval for the Victor Project divisions within Attawapiskat, between Mushkegowuk First nations, and between Aboriginal and environmental groups prevented a unity of interests from forming that might have posed a serious challenge to De Beers.

The question remains as to whether Attawapiskat First Nation will be able to translate any benefits from the Victor mine into cultural and economic sustainability. While incorporating Traditional Knowledge into environmental assessment processes promises to be a step in the decolonization of Indigenous peoples, the unequal power relationships between First Nations and state governments and their client industries is an immense challenge. The relation of industrial development projects to long-term processes in the colonization of Indigenous peoples was not examined in the Victor environmental assessment. Ideally the assessment process was to bring together Indigenous ways of life with industrial development in a manner that was mutually beneficial, suggesting that this would be a necessary and fundamental component. However, it is not so surprising if the incorporation of Traditional Knowledge was in part intended to deflect discussion on issues of colonization. This is accomplished by giving a forum for its discussion without connecting it to decision-making in a way that is meaningful to Indigenous peoples. As the flaws of past environmental assessments, particularly those for Ekati and Diavik, are repeated in the Victor assessment, perhaps the

EA process is accomplishing exactly what its creators intended. Resistance to controversial development proposals is tapped of its energy as it becomes entangled in bureaucratic processes that give the appearance of meaningful consultation without connecting community participation to decision-making. Thus, projects can proceed with the tepid support of local communities without accomplishing the difficult task of addressing their central concerns.

It is not as if Attawapiskat First Nation members were naïve about the pitfalls of participating in the environmental assessment. They were acutely aware of how political processes serve to obfuscate issues of importance to First Nations. However, they saw little alternative but to participate, as they would otherwise have been bypassed altogether in discussions between governments and De Beers. Their participation at least kept them informed of De Beers plans so that the community could somewhat prepare. Chief Mike Carpenter and Deputy Chief Miriam Wesley noted how they viewed their participation as a learning process. Both indicated next time a major project proposal is made they will be more effective in having their issues addressed. Attawapiskat First Nation members largely believe Victor is a better project because of their participation, and through great effort on their part and other regional First Nations De Beers has been somewhat responsive to their concerns. Traditional Knowledge and the wisdom of Elders have provided the community of Attawapiskat with a clear understanding of the context of the Victor Project. Despite poor integration into the environmental assessment process, Traditional Knowledge is fundamental to how the Attawapiskat Cree will understand and adapt to changes in their community and the environment.

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Appendix A

Schedule of Interviews

Brian Cummins, Anthropology Department, Trent University, February 16th, 2006.

Lise-Aurore Lapalme, Senior Policy Advisor, Natural Resources Canada, August 10th, 2006.

David Okimaw, Aboriginal Employment Coordinator, De Beers Canada Victor Project, August 28th, 2006, and October 27th, 2006.

Theresa Hall, IBA Implementation Committee and former Chief, Attawapiskat First Nation, August 29th, 2006.

Mike Carpenter, Attawapiskat First Nation Chief, August 30th, 2006.

Gaberial Fireman, Elder, Attawapiskat, October 23rd, 2006.

John Matatawabin, Elder, Attawapiskat, October 23rd, 2006.

John Mattinas, Elder, Attawapiskat, October 23rd, 2006.

Jorge Hookimaw, Resident, Attawapiskat, October 23rd, 2006.

James Jacasum, Elder, Attawapiskat, October 24th, 2006.

Greg Shisheesh, Resident, Attawapiskat, October 24th, 2006.

Annabella Iahtail, Elder, Attawapiskat, October 24th, 2006.

Theresa Hookimaw, Elder, Attawapiskat, October 24th, 2006.

Paul Mattinas, Resident, Attawapiskat, October 25th, 2006.

Brian Nakogee, Resident, Attawapiskat, October 25th, 2006.

Suzanne Barns, Lands and Resources Director, Attawapiskat First Nation, October 25th, 2006.

Miriam Wesley, Attawapiskat First Nation Deputy Chief, October 27th, 2006.

Deborah McGregor, Strategic Policy and Aboriginal Relations, Environment Canada, December 7th, 2006.

Appendix B

Interview Question Schedule
Traditional Knowledge and the Victor Diamond Project
Ryan Bowie
Trent University

- Personal information (name, age, position/role in the community).

- Can you describe your involvement with the Traditional Knowledge Study for the Victor Diamond Mine Environmental Assessment?

- Are there particular reasons why you were asked to participate?

- Do you feel the study was adequate for Traditional Knowledge to contribute to the assessment?
    - What aspects of Traditional Knowledge were you asked to focus on?
    - What aspects of Traditional Knowledge do you feel were not well considered in the study?
    - Are there other ways in which Traditional Knowledge could contribute to the Victor Environmental Assessment beyond the TEK Study?
    - Are there barriers to Traditional Knowledge being given proper consideration in the Environmental Assessment?
    - Do you feel your knowledge was respected by those conducting the study?

- Do you have concerns about the inclusion of Traditional Knowledge in the Victor Environmental Assessment?

- What impacts do you believe the mine will have?

  - Have there been impacts that you are aware of from the mine so far?
  - How do you think harmful impacts can be minimized?

- Does the community need the mine?
  - In what way is it needed or why is it not needed?

- Are there ways in which the Victor mine can benefit particular traditional activities?

- How might Cree values be reflected in how the mine is operated?

- Do you feel that by contributing to the TEK Study you had any influence over decisions regarding the mine?

- Were there any other ways in which you were able to have input into the environmental assessment of the mine?
  - Were these other ways effective?

- What do you see as the goal of employing Traditional Knowledge in the Victor environmental assessment?
  - Do you think these goals are being met?
  - Do you think your participation was beneficial in any way?
  - What would you recommend for environmental assessments to be successful?