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Patricia J. Fitzpatrick

Abstract

The discovery of indicator minerals in the Slave geological province began a staking and development rush that, in a little over a decade, saw Canada becoming one of the world's largest producers of diamonds. An examination of the institutions surrounding the development of the first two diamond mines illustrates the complexities associated with mineral development. An emerging picture of a new approach to the northern staples-based economy reveals efforts to promote responsible economic development within a sound environmental framework. Furthermore, this approach necessarily involves the incorporation of a group of policy actors with agendas, needs, and requirements qualitatively different from those of traditional resource developers and producers. Thus the new diamond projects are proceeding in a way that is qualitatively different from historical practices that have governed staples based development in the mineral sector.

Introduction: Complexity, Governance and Canada's Diamond Mines

The discovery of indicator minerals in the Slave geological province began a staking and development rush that, in a little over a decade, saw Canada becoming one of the world's largest producer of diamonds. The impact of this development introduced a new dynamic into the northern political economy. Moreover, if the mineral industry wished to produce new mines in the current era, it needed to operate within a completely different political and social environment than had traditionally been the case. Unlike in previous eras when it could count on government and public support, the case of Canadian diamond mining illustrates the complexity of new mineral development processes in an era marked by environmental concerns and the entrance of new actors, like aboriginal groups, into the mineral policy process.

Broken Hills Proprietary Diamonds Inc (BHP) owned the first operational diamond mine in Canada, and Diavik Diamond Mines Inc. (DDMI) owned the second mine. Diamond mining has become a lucrative business. Each diamond is afforded a price based on its size, clarity, and colour. In 2001, the average price per carat of Canadian diamond was \$228, making it the third highest world price (Santarosa 2003). In 2003, Canada became the third largest producer of diamonds. In the first four years, from 1998 to 2002, Canada produced carats worth roughly \$2.8 billion dollars; this production contributed to an economic "surge" of 5.1 per cent in 2002, as diamond mining contributes to just over 20

per cent of the Territories' GDP.

An examination of the development and operation of both projects illustrates how mineral policy institutions have evolved to reflect the dynamics of new Northern power relations. Governance of the diamond mining industry in the Northwest Territories (NWT) is influenced by rapid industrial development within the context of evolving environmental assessment (EA) processes and changing relations with First Nations – all of which have come about in a broader political economic era often referred to as a "new" staples state.

The Northwest Territories Policy Community

Natural resource development is an important component of the economy of the three Canadian northern Territories – Yukon, NWT and Nunavut (Conference Board of Canada 2002). Although the modern-historical economy of the NWT originally relied on the fur trade, the economic base has shifted to other forms of resource development. Non-renewable, staples resources, including mineral and oil and gas development, are among the strongest economic-generating activities in the NWT. For example, in 2001, non-renewable resource development contributed \$585 million, or 24 per cent, to the Territory's GDP. In addition to these activities, renewable resources, including hydro power generation, tourism, and traditional economic activities play modest roles in the wage economy.

The continued (and growing) contribution of mining to overall wealth generation in the Territory offers evidence that staples, particularly mineral and oils and gas, remain an important component of the economy. As noted by the NWT Department of Renewable Resources (2003) "[t]he economy of the NWT is inextricably linked to mining". This trend shows little sign of changing, as recent mineral discoveries (diamonds), and oil and gas exploration have contributed to recent growth in GDP. As such, "non-renewable resources will continue to be the focus of economic activity in the Territory in the years to come" (Conference Board of Canada, 2002, viii).

The mineral policy community in the NWT and Nunavut (NU)¹ reflects a unique set of constituents with diverse values and needs. These territories include roughly 37 per cent of Canada's landmass, encompassing a large ecological environment of taiga and tundra. In terms of population, however, the NWT and NU house less than 0.2 per cent of Canada's people. The residents include numerous Aboriginal cultures. The federal government, territorial government, non-governmental organisations (NGOs), and specific project proponents serve as advocates for other northern interests, thereby resulting in an increasingly complex set of interactions between actors and institutions and very different developmental dynamics than have historically been the case in northern staples economies.

Aboriginal Organisations

As discussed elsewhere (see Booth and Skelton 2004), Aboriginal communities share a unique relationship with the land and water. It is this relationship and the relatively high percent population of Aboriginal people in the Territories that merits particular consideration regarding the relative of power of these policy actors with respect to natural resource management. Since the early 1970s, legislation, treaties and legal challenges have served to clarify (and strengthen) the rights of Aboriginal people over the land and resources within their traditional territory.

In terms of legislation, section 35 of the 1982 Canadian Constitution establishes that Aboriginal people have treaty rights, and therefore, access to resources. Drawing on this section, the judicial system has been employed as recourse when Aboriginal rights are not respected. Recent Supreme Court of Canada decisions reaffirms this special relationship with the land (R. v. Sparrow, 1990, Delgamuukw v. British Columbia, 1997). While infringement of these rights is possible on the basis of compelling and substantive legislative purposes, to do so, the crown must demonstrate "Aboriginal participation in resource development, consultation and in restricted circumstances, consent, and fair compensation" (Usher 2003, 378). Given this judicial mandate, Aboriginal organisations have experienced an ever-increasing role in resource development.

Historic treaties, and modern day land claims settlements are designed to address the Aboriginal title to land areas. Of particular interest to this discussion is how land claims agreements address natural resource management. The early 1990s saw the settlement of three land claims agreements within the geographic boundaries of what was then the NWT. Each of these and subsequent agreements provide for a system of land, water, and environmental management inclusive of representation by delegates of the affected claims block.

Management boards, consisting of tripartite membership (with federal, territorial, and Aboriginal appointments) have, in fact, strong aboriginal representation (White 2002). Despite structural shortcomings,² White (2002, 97) believes that the boards represent introductory efforts at power-sharing and cross-cultural governance. As such, the Boards represent important instruments of Aboriginal influence over important land, environment and wildlife decisions.

Beyond the management of natural resources, land claims agreements contribute to additional factors that influence development in the North. Initial cash settlements for the surrender of traditional lands, for example, can foster economic development (Saku 2002) and agreements provide opportunities for revenue-sharing when wealth is generated on traditional lands, This occurs

through sharing of royalties, and the negotiation of IBAs between the proponent and the affected organisation(s), as discussed below (Booth and Skelton 2004) These provisions increase the economic capacity of Aboriginal organisations to become engaged in secondary and tertiary industries associated with the development.

Despite these changes that ensure Aboriginal organisations are no longer at the margins of resource management issues, a long list of issues of power and control regarding Aboriginal title, nationhood, access to and management of land and resources remain unsolved (Usher 2003). Furthermore, as noted by Poelzer (2002), each Aboriginal organisation has its own context – each has a localised approach to, resources for, and capacity regarding specific environmental issues. Multiple, and different Aboriginal policy actors come to the negotiating table with unique agendas.

Notwithstanding these cautionary notes, the reaffirmation of treaty rights, the progressive settlement of outstanding land claims, and changing dynamics related to natural resource management have significantly increased the relative power of Aboriginal organisations over resources in their traditional territory. This power shift has influenced patterns of northern governance and, inevitably, its political economy.

Territorial Government

Formal, institutional government in the Territories is complex. Clancy (2001, 45) details the history of governance in the NWT from the 1940, when the Territories "remained a federal colony, still awaiting representative and responsible government" to the present. Since that time, there has been a devolution of Federal powers to the territorial government. To date, the territorial government has acquired control of some of the powers of Provincial governments with two notable exceptions: full participation in Constitutional reform, and control of Crown land (and financial resources associated with the land) (Dickerson 1992). Although there is a commitment by the federal government to further devolve powers to manage land and natural resources, this commitment remains unfulfilled (Canadian Institute of Resources Law 1997). This evolving relationship between the federal and territorial governments affects the relative power of each level of government, and has the potential to affect the interaction of the two levels of government in issues concerning crown lands, including diamond development.

Beyond the federal-territorial rapport, the 1990s saw the development and implementation of the Nunavut Final Agreement, with the creation of a distinct Nunavut Territory. The increasing role of Aboriginal people in natural resource management provided through the settlement of outstanding claims, discussed

above, affects the governance of these issues. Negotiations surrounding the changing legal regimes and relationships required by the territorial division occurred during early diamond development. As such, another layer of complexity influenced the development of Canada's diamond mines.

Non-Governmental Organisations

An NGO is a label for multiple types of organisations whose sole common attribute is that they are not government (Martens 2003). In the broadest sense, NGOs can include industry and business associations, research/teaching organisations, labour unions, media, and other interest groups. For the purpose of this discussion we will focus on two categories: interest groups (specifically environmental NGOs) and business and industry organisations.

As with Aboriginal organisations, many environmental NGOs occupy a specific niche and use unique political approaches (Wilson 2002). Some environmental NGOs are active in environmental management issues the NWT, including the Canadian Arctic Resources Committee, Ecology North, the Canadian Nature Federation, World Wildlife Fund Canada and the Canadian Parks and Wilderness Society. However, while both mature and post staples political economies are characterised by an increasing role of environmental NGOs in policy development, it is difficult to evaluate the relative influence of these groups on staples development processes. Harrison (1996), observes that environmental NGOs have played a role in shaping government policy. "The entire structure of federal and provincial laws governing the use of Canadian land, water, and air bears the strong imprint of environmental organizations". Furthermore, Greer-Wooten (1994, 282) notes that NGOS are "widely regarded by industry opinion leaders as representing legitimate public interests, staffed by knowledgeable persons", and provide a greater role in decision making, particularly through positions on advisory boards. Wilson (1992) however, suggests that environmental NGOs operate only in the peripheral zones of the environmental management communities. These broad, and seemly contrary, assessments suggest that the relative power of environmental NGOs merits consideration on a case-by-case basis.

Beyond environmental NGOs, business and industry associations are also active in the northern policy community. Business and industry associations differ in mandate from environmental NGOs in that these NGOs represent industry/private sector interests. The NWT and NU Chamber of Mines, and the Yellowknife Chamber of Commerce are two associations which are active in northern resource management. Like environmental NGOs, however, the relative power of these policy actors requires consideration on a case-by-case basis.

Proponents

Proponents serve as the fourth category of policy actor involved in the mineral industry. Although linked with business and industry associations, in that proponents represent private sector interests, these policy actors are unique in that they have a financial interest in specific resource projects. As such, it is important to consider the degree to which proponents have power relative to institutions that govern their investment.

The First Diamond Development in the North: The BHP Process

The 1989 discovery of diamond-indicator minerals (garnets, chrome diopsides) by explorationists Charles Fipke and Stu Busson began a staking and diamond-development rush in the NWT (Hoos and Williams 1999). Diamonds are found in kimberlite pipes, volcanic intrusions found in the Slave Geological province. The first two viable mine stocks, the BHP and DDMI claim blocks, are located near Lac de Gras, the headwaters of the Coppermine River.

The closest community of Gameti, a Tlicho village, is over 150 km away and the city of Yellowknife over 300 km away from both the BHP and Diavik claim blocks. This area, however, was historically subject to extensive and overlapping land use by the ancestors of numerous groups of claimants. The site is in the traditional land use and settlement territories of the Tlicho, the Akaitcho Territory Dene (including the Lutsel K'e Dene First Nation, and the Yellowknives Dene First Nation), and the North Slave Metis Alliance (Ritter 2001). It is also in the traditional land use area of the Kitikmeot Inuit Association. In addition to historic use of this land, modern day residents of the NWT and NU continue to rely on caribou and other wildlife that live or migrate through the area. Drinking water for residents of Kugluktuk originates in this watershed. Thus, policy actors interest was established not only through proximity to the project and historical land claims, but by use of resources originating or migrating through the project site.

The EA of the first diamond proposal, the BHP NWT Diamond Project,³ occurred between January 1994 and August 1996. The BHP NWT Diamond Project was subject to a panel review under the terms of the first federal EA process, *The Environmental Assessment and Review Panel Guidelines Order (1984)*. A four person panel, with expertise in NWT Aboriginal peoples, geology, resource and environmental issues, among others, evaluated the proponent's impact statement, weighed evidence related to potential impacts, and recommended to the Minister of the Environment that the project be allowed to proceed, subject to twenty-nine recommendations regarding the project and related issues.

New institutions, specifically the West Kitikmeot Slave Society, created in

anticipation of this development, illustrate how the mineral industry was faced with a new political approach to resource development.

West Kitikmeot Slave Society

Concurrent with the announcement of the panel members for the first diamond mine was notice of the establishment of a research program centred on the Slave Geological Province. Recognising the likelihood of increased mineral exploration and potential for development, the West Kitikmeot Slave Society (WKSS) was formed to oversee a research program directed at providing baseline information to be used in resource management in this region. The objectives of this society addressed multiple agendas, including the collection of traditional and scientific knowledge, development of cross-cultural research linkages, and implementation of community research training opportunities. Over the course of five years, nineteen projects were funded by WKSS, covering a range of issues.

The program was governed by a management board, consisting of representatives appointed by various policy actors, including the Dogrib Treaty 11 Council, the Lutsel K'e / Yellowknives Dene First Nations, Inuit organisations, Nunavut co management organisations, Metis Nation NWT, industry and business associations (through the NWT Chamber of Mines), environmental organisations (representing the Canadian Arctic Resources Committee, Ecology North, World Wildlife Fund, Canadian Nature Federation), the Government of the NWT, and the Government of Canada. The management board was "responsible for managing Study resources, making decisions on the design and conduct of research, ensuring that the interests and policies of the Partners are respected, public involvement, and directing the operations of the Study Office" (West Kitikmeot Slave Society 1995). The board had decision-making authority over the projects it would fund, subject to the availability of financial resources.

The WKSS was an innovative research program, ensuring that those with historic and current interest in the area under study were actively involved in furthering the research agenda. However, because of the timing of the program, research from the WKSS was not available for the EA of the BHP NWT Diamonds Project. Beyond this effort to improve baseline research of the development region, however, the implementation of the EA process with an active public involvement program allowed the policy actors a role in the mining development.

Community Capacity and Public Participation in the BHP Review Process

While an analysis of the public participation program completed as part of the BHP panel review is outside the scope of this review, two factors, participant assistance, and opportunity for public comment, merit discussion. Participant assistance involves the provision of funding to interested public to facilitate participation in large-scale EAs. This money can finance research and administrative expenses related to participation in the assessment. Participants of the BHP EA received funding totalling \$255,000 to engage in discussions surrounding the scope of the EA (\$105,000 to 14 groups) and review the impact statement (\$150,000 to 12 groups) (Couch 2002). Applications for funding were reviewed by a committee of experts selected by the Canadian Environmental Assessment Agency, as is the standard process for participant funding. Although the specific policy actors were not involved in determining resource allocation (which would be a conflict of interest), funding increased the capacity of each organisation to participate.

Keeping with the tradition of public engagement promoted during the Berger Inquiry, meetings were organised in potentially affected communities. The public reviewed the guidelines for the impact statement through scoping meetings (held in eight communities) and written submissions. The public review of the impact statement included hearings held over 18 days in nine communities, and written submissions. During the assessment, the panel received over 125 written submissions, and listened to over 410 verbal presentations by various participants (Canadian Institute for Resources Law 1997). These participants included representative-organisations of each of the policy actors discussed above.

As with public participation in other EA processes (see for example, Fitzpatrick and Sinclair 2003), concerns arose regarding level of funding, timing of resource disbursement, and the timing of public consultation. The Canadian Institute for Resources Law (1997) noted that while participation was inclusive of affected interests, a greater balance should have been sought between imposing deadlines and allowing for time in process to proceed, and providing adequate financial resources for participants through the assessment and regulatory process. O'Reilly (1998) takes this point further, concluding that "[f]ew if any of the participants came away from the EA with any satisfaction including the proponent".

Despite this negative perception on the part of some participants, activities surrounding the BHP EA have been identified in the mining industry as setting a high standard for community engagement in project development. In a recent survey of thirty-eight mining executives, representing 70 per cent of mining

industries listed on the Toronto Stock Exchange, Annadale (2000) noted that mining companies were driven to exploring a more interactive approach to EA because of the BHP experience. This interactive approach to mine development, featuring input from all policy actors, is a marked departure from the historic staples development era discussed by McAllister. Beyond this input, however, different policy actors are also playing a role in the institutions governing mineral development.

The Implications of Superadded Agreement

Numerous authors, including Valiente (2002), Hessing and Howlett (1997), and Harrison (1996) have detailed how provinces and federal governments share constitutional authority over natural resource management. One impact of this shared jurisdiction, which has led to overlapping legislative responsibilities, is that during the course of an EA, recommendations are made in areas for which the responsible authority has limited or no constitutional authority to enforce. The responsible authorities, those which must issue permits, leases and licenses regarding the project, are put in an difficult position in that they are supposed to ensure these issues are implemented by the proponent, despite having limited or no regulatory authority to do so. In other words, these commitments that cannot "be formalized in legal or regulatory requirements or that were better suited to a more flexible approach" (Canadian Institute for Resources Law 1997, 23).

To resolve this issue, two agreements were negotiated following the acceptance of the EA to address how monitoring should be undertaken in the context of these superadded responsibilities, the environmental agreement and the socio-economic agreement. The proponent, federal government, territorial government and Aboriginal organisations negotiated the BHP Environmental Agreement. Aboriginal organisations were not signatories to the agreement, but rather were included in the process through the Implementation Protocol, attached to the Agreement. NGOs (environmental or business and industry) were not involved in negotiating or implementing this institution.

Although environmental agreements were used to "superadd" responsibilities in the past, the scope and public nature of the BHP environmental agreement were unprecedented (Canadian Institute for Resources Law 1997). According to O'Reilly (1998),

The Environmental Agreement was seen as a tool to ensure BHP lived up to the any promises it made both in its EIS and verbally during the hearings before the panel. The Agreement was also viewed as a way to demonstrate an integrated and innovative approach to monitoring and environmental management of the project's effects.

The environmental agreement covered a range of issues, including the

development of environmental management programs, reporting requirements, closure, and reclamation plans, the provision of security deposits to act as remedies for potential infringements on the arguments, and the establishment of an Independent Environmental Monitoring Agency (discussed below).

The Socio-Economic Agreement was negotiated between the proponent and the Government of the NWT. The federal government, Aboriginal organisations, and NGOs were not involved. "The principal purposes of the Socio-Economic Agreement are to maximize the economic benefits of the BHP project to residents of the NWT and to minimize its negative social impacts" (Canadian Institute for Resources Law 1997, 23). The socioeconomic agreement covered a range of issues including training commitments, health and social services programs and monitoring, and local business development initiatives. In terms of employment, a number of commitments established in the socio-economic agreement ensure that Northern residents, including Aboriginal people, have opportunities to profit from this staples development. The agreement includes hiring targets for both Northern residents and Aboriginal people for both the construction and operational phases of the mine (see Table 1). Furthermore, the company committed to specific targets for local business supply. However, as this agreement does not include discussion of penalties for non-compliance, it is primarily a contract outlining cooperation between the signatories (Canadian Institute for Resources Law 1997).

Table I Northern and Aboriginal Employment Targets (as identified in the Socio-Economic Agreement) and Actuals at Ekati™.

Phase	Target		Actual	
	Northern Resident	Aboriginal Resident (*)	Northern Resident	Aboriginal Resident (*)
Construction	33%	44%	N/A	N/A
Early Operation	62%	50%	75%	39%
Late Operation	72%	50%	N/A	N/A

(*) as percentage of Northern Residents

In addition to proponent-government agreements, IBAs were negotiated between BHP and affected Aboriginal communities. These bilateral agreements address the specific impacts of development on Aboriginal people. Although specific agreements are confidential, Ritter (2001) notes they "cover such things as job opportunities, training, and preferential hiring programs; financial transfer payments, royalties and equity participation; new business development and

contractual arrangements; and compensation for declines in harvests of wildlife and fish". While these agreements are requirements of some of the settled land claims, there was no requirement for IBAs in the BHP case (Canadian Institute for Resources Law 1997). However, the Minister of Indian Affairs required the illustration of "significant progress" in negotiations prior to the approval of the company's leases and licenses.⁴

The superadded agreements negotiated around the BHP NWT diamonds project provide specific requirements for the company to address environmental and social impacts associated with the development, one where efforts are made to mitigate negative impacts. These requirements are indicative of the new political approach to staples development. One subset of the environmental agreement, the BHP Independent Environmental Monitoring Agency (IEMA), merits specific discussion.

BHP Independent Environmental Monitoring Agency

As indicated above, one of the requirements of the Environmental Agreement was the formation of the IEMA. This agency consists of a seven-member board of directors, four of whom are appointed by Aboriginal organisations, and three appointed jointly by BHP, the federal and territorial governments, in consultation with Aboriginal organisations. NGOs are not represented on the IEMA. "Although the name of the Agency might imply that monitoring is directly carried out, the real function of the Agency is as more of an oversight or audit mechanism" (O'Reilly 1998). As per the panel recommendation, the IEMA reports on company monitoring and the compliance by the company to commitments related to the environment. The Agency does not have decision-making authority; IEMA reviews documentation, and makes recommendations to the appropriate responsible authority.

The Canadian Institute for Resources Law (1997) has argued that while the IEMA is a positive step, there is need to strengthen horizontal linkages between the Agency and broader initiatives, such as those of the WKSS. IEMA is charged to "participate as an intervenor in regulatory and other legal processes respecting environmental matters" (IV2(d)), as a project-specific monitoring agency, these matters must relate to the BHP NWT Diamonds Project. Despite this criticism, the development of an independent agency charged with monitoring the impacts of a project is an important tool for balancing system components.

Institutions involved in the governance of the BHP NWT Diamonds project are indicative of the "new" staples economy, one that responds to diverse group of policy actors and forces. This "new" economy includes consideration of the longitudinal environmental, social and economic implications of mineral development. The strengths of the BHP case were replicated in the consultation initiatives designed for the DDMI EA.

The Diavik Diamonds (DDMI) Project: Comprehensive Study

When DDMI submitted its applications for required leases and licenses, and thereby triggered an EA, the federal review process was governed by the newer Canadian Environmental Assessment Act (CEAA (1992)). As stipulated in this process, the DDMI project triggered a comprehensive study review. This assessment track required consideration of the purpose of, need for, and alternatives to the project, in addition to the environmental effects of the project.

Consistent with the legislative requirements, the EA the federal departments involved in issuing leases, licenses and permits for the project, in this case Indian Affairs and Northern Development Canada (INAC), the Department of Fisheries and Oceans (DFO), and Natural Resources Canada (NRCan), facilitated the assessment. As the lead Responsible Authority for the EA, INAC coordinated the assessment, and maintained the public registry. In spite of these changes, many of the institutions, including WKSS, involved in governance of the DDMI had their origins in the BHP NWT Diamonds project.⁵

As with the BHP NWT Diamonds project, many different policy actors were involved in the mining development. The approach taken in the DDMI case, however, allowed key policy actors a more active role in the EA.

Community Capacity and Public Participation in DDMI EA

An EA steering committee was struck to recognise the desire of Aboriginal organisations to be actively engaged in the assessment process. This committee included representatives of Aboriginal organisations, the Responsible Authorities, and the government of the NWT. Neither NGOs, nor the proponent were represented on the steering committee. Although not all organisations provided a seat on this committee participated chose to participate, all representative groups were provided with key documentation related to both the steering committee, and the assessment process.

While the steering committee did not have decision-making authority, it served as "an advisory body reporting to the RA Caucus on all matters relating to the comprehensive study review process for the Diavik Diamonds Project" (Department of Indian Affairs and Northern Development, Department of Fisheries and Oceans, and Natural Resources Canada 1999, Appendix B). Meeting on a monthly basis, this committee advised the Responsible Authorities on how to address outstanding issues, including how to mange the public consultation process.

This role in facilitating the assessment process did not preempt participation in the EA and organisations involved in the steering committee joined the EA public consultation program. Public involvement was encouraged during the

formal EA process through written submissions, and three types of gatherings: community and information meetings, technical meetings, and public technical sessions, held in various communities. Community and information meetings allowed the affect communities opportunities to ask questions about the impact statement. These meetings were arranged primarily between the proponent and Aboriginal organisations, with contribution by INAC. Technical meetings focused on key issues of interest to stakeholders; meetings, held in different communities, included evening sessions for members of the general public to ask questions and engage in discussion with experts. Public technical sessions, held between September 1998 and March 1999 provided government an opportunity to report on findings, and address public questions posed through the course of the review. Each of the technical session formats was advised by the steering committee. Following the completion of the comprehensive study report, the Canadian Environmental Assessment Agency facilitated a one month public review of the report, consistent with the terms of CEAA.

Money was offered to different policy actors interested in participating in the assessment process, although this was not required in the legislation. Aboriginal organisations and NGOs received funds to participate in the assessment process. Similar to the funding process used for the BHP NWT Diamonds project, applications were evaluated on a case by case basis. In this situation, however, INAC (rather than an independent committee appointed by the Canadian Environmental Assessment Agency) reviewed the applications; NGOs (again) did not contribute to decision-making regarding funding disbursement.

The EA of the DDMI project greatly expanded opportunities for the public to be engaged in the assessment process. However, concerns were expressed about this consultation strategy. As noted by the Mackenzie Valley Environmental Impact Review Board (MVEIRB), the adaptive approach taken by the Responsible Authorities, and the steering committee, resulted in a process that "fell short of public expectations for an independent assessment that provided a clear and consistent process for public involvement". To support this assertion, the MVEIRB observed that while the steering committee was designed to include Aboriginal organisations in the assessment design, the institution served in an advisory, not a management role. Second, concerns arose regarding the adjustment of the assessment schedule to include workshops. These changes, although designed to address public concern, may have confused the process. Finally, the Board questioned the timing of the assessment process, suggesting that the need of the proponent may have unduly influenced the timing of the release of the comprehensive study report.

Again, despite these shortcomings, the inclusion of Aboriginal organisations in the committee involved in designing the EA process, increased the relative

power of these policy actors in governing mineral development. These shifting dynamics continued through the negotiation of superadded agreements associated with the project.

Superadded Agreements: New Players

Environmental and Socio-Economic agreements addressed the superadded duties associated with the DDMI EA. As with the BHP environmental agreement, issues addressed through this institutional framework included the development of environmental management programs, reporting requirements, closure and reclamation plans, security deposits to act as remedies for potential infringements on the agreements, and the establishment of an Environmental Monitoring Advisory Board (discussed below). In addition, the agreement compels DDMI to participate in the development of a regional cumulative effects assessment and management framework, discussed below. The socioeconomic agreement covered range of issues including employment and training commitments health and social services programs and monitoring, local business development initiatives, and formation of the Diavik Projects Community Group Advisory Board, discussed below. Again, the socio-economic agreement ensured that Northern residents, including Aboriginal people, had opportunities to profit from the development. The Agreement also included hiring targets (see Table 2) and local business supply targets to increase the economic return of the development to Northern residents.

Table 2
Northern and Aboriginal Employment Targets (as identified in the Socio-Economic Agreement) and Actuals at DDMI

Phase	Target		Actual	
	Northern Resident	Aboriginal Resident (*)	Northern Resident	Aboriginal Resident (*)
Construction	40%	Unspecified	N/A	N/A
Early Operation	66%	40%	73%	37%
Late Operation	100%	40%	N/A	N/A

^(*) as percentage of Northern Residents

A salient difference between these two institutional frameworks was the role of Aboriginal organisations. Unlike the BHP environmental agreement, Aboriginal organisations could exercise become a party to the Socio-economic agreement. The initial agreement was signed in October 1999, and all five potential Aboriginal organisations became signatories by the end of 2001 (Eggleston 2002). NGOs, however, were not involved.

Finally, DDMI also negotiated IBAs, termed "Participation Agreements", with various communities. The structure and timing of these negotiations were similar to those experienced with the BHP NWT Diamonds Project; eighteen months lapsed between the final regulatory approval for the project, and the signing of the last IBA. As noted by the MVEIRB, the (continued) separate negotiations for three types of superadded agreements (the environmental agreement, the socio-economic agreement, and the IBAs) created a gap in understanding how impacts could be mitigated, and monitored (as they may be monitored through these institutions).

Advisory Board

The environmental agreement included provision for the formation of the Environmental Monitoring Advisory Board (EMAB). This board is the second independent monitoring agency assembled in conjunction with diamond development in the North. EMAB includes one representative for each of the Dogrib Treaty 11 Council, the Yellowknives Dene First Nation, the Lutsel K'e Dene First Nation, the Kitikmeot Inuit Association, the North Slave Métis Alliance, the Government of the NWT, the Government of Canada, and DDMI, for a total of eight members. Again, NGOs are not represented on the board, although the agreement includes provision to expand the EMAB, should all parties agree.

In addition to monitoring on company reports, and compliance with commitments, EMAB has the added function of ensuring communication among parties to the Agreement (section 14.1). This agreement also includes more direct requirements for public participation. Whereas the BHP IEMA is directed to facilitate participation to achieve its purpose, the Advisory Board is also required to *create opportunities* for community and public participation (section 1.1 (e)).

The Diavik Projects Community Group Advisory Board reflects the structure of the previous monitoring institutions, but also addresses the issue of socio-economic monitoring. This board is community based, in that it has representation from the Government of the NWT (2 members), DDMI (2 members), the Dogrib Treaty 11 communities (4 members), the Yellowknives Dene Band (2 members), the Lutsel K'e Dene First Nation (1 member) the

North Slave Métis Alliance (1 member) and the Kitikmeot Inuit Association (1 member). The Federal government and NGOs do not have seats on the Board.

The Community Group Advisory Board monitors employment, training, the business opportunity strategy, and the Employee and Family Assistance Program implemented by DDMI, among others (2.1.2 (c)). In doing so, the board provides an advisory function. Representatives on this board also act as a liaison and communications link between their respective communities and the board; as such, rather than acting as independent watchdogs, the representatives serve as advocates for their respective constituents. The agreement also requires the board to implement opportunities for public participation. The Community Group Advisory Board expands consideration of social impacts of development beyond the original EA; this innovation further illustrates the changes in the social and political reality of the "new" staples economy.

Cumulative Effects Assessment and Management Strategy

The comprehensive study also recommended that DDMI participate on the Cumulative Effects Assessment and Management Strategy (CEAM) steering committee. The CEAM steering committee includes representatives of Aboriginal organisations, industry, co-management boards, federal and territorial governments, and environmental NGOs. The steering committee is charged with creating a plan to "facilitate the protection of ecological integrity, the building of sustainable communities (including social and economic dimensions), and responsible economic development within a sound environmental management framework". To achieve this goal, the strategy blueprint addresses such areas as land use planning, baseline studies and research that builds on the WKSS, decision-support research, engagement in project-specific assessment (as it relates to cumulative impacts), and information management, among others. The committee serves an advisory function, with decision making resting with the federal departments and other organisations, including co-management boards, which have mandates related to cumulative effects assessment and management.

The commitment to cumulative effects assessment marks a new effort in government policy to expand consideration of environmental impacts to a regional level; the inclusion of policy actors in facilitating this provides an effort to consider the complex biophysical and social environment in the north.

Other Diamond Developments in the North: The DeBeers Project

Since the completion of the DDMI project in 1999, numerous changes have occurred in the governance institutions. The implementation of the Mackenzie Valley Resource Management Act (MVRMA), and the assessment of the third diamond mine under the terms of that Act, have influenced the cross-scale linkages among institutions governing diamond development. For the most part, the MVRMA replaces the jurisdiction of CEAA, and provides a different vehicle for land and water management boards in the NWT, MVEIRB now facilitates EA in the Mackenzie Valley, which includes the NWT portion of the Slave Geological Province. This public review board has a minimum of seven members, one half nominated by Aboriginal organisations, and one-half nominated by government. NGOs are not involved in the nomination process. Although the federal government funds the board, it is both independent from both government and the Aboriginal organisations which nominate members.

The third diamond project was assessed under the terms of the MVRMA. The Debeers Canada Mining Inc Snap Lake Development Project involved the construction and operation of a diamond mine 220 km northeast of Yellowknife at the headwater of the Lockhart River Drainage system. The EA was completed October 10, 2003. A detailed comparison of the assessment requirements and process is outside the scope of this paper But similar environmental and socioeconomic agreements were negotiated as with the BHP and DDMI processes. Noting the increasing number of institutions governing development in the Slave geological province, there is now increasing concern about a fragmented approach resource development Preliminary discussions also suggest there is increasing support for a regional monitoring agency. This regional agency would include monitoring of project specific activities, and cumulative impacts.

Conclusion

Mining, by definition, is a staples-based sector. Recognising both the finite nature of mineral development, and policy issues associated with a staples-based economy, policy actors in the mining industry are adopting innovative practices to address cumulative impacts of development, and mitigate negative structural economic issues that mark a staples-based economy. These innovations, including fly-in, fly-out operations with northern and Aboriginal hiring targets, requirements to undertake primary processing in the North, and attempts to develop "value-added" economic activities mark the development of a "new" staples economy. To respond to these changing dynamics, institutions governing mineral development are attempting to provide a foundation for balancing

the social-ecological environment with political and economic realities. These institutions strengthen the capacity for balancing system components, including economic diversification, prior to the depletion of resource endowments and economic competition from lower cost staples regions.

As illustrated through the review of the BHP NWT Diamonds project, and the DDMI project, the new diamond economy of the North developed in a very different political and economic environment than the one traditionally associated with mining. At the turn of the 20th century, governments took an active role in promoting mining as a nation-building tool, unconcerned with maintaining biophysical integrity of valued ecosystems, the presence of NGOs raising concerns about the impacts of resource development or the place of Aboriginal peoples at the decision-making table. Moreover, activities did not take place under the glare of international media attention. All these factors were in place as a new kind of staples economy was developing at the turn of the 21st century. Resource development in the north necessitated the incorporation of a group of policy actors with agendas, needs, and requirements qualitatively different from those of the traditional resource developers and producers. Governments required a more flexible and inclusive regulatory approach but the results of this process now means that the governance of resources in the NWT is very complex. Mines are governed through a variety of old and new institutions, with input from different policy actors.

A discussion of institutions such as the West Kitikmeot Slave Society and the Environmental Monitoring Advisory Board reveals an emerging picture of a new approach to northern staples-based economy, one which is striving for responsible economic development within a sound environmental framework. The new diamond projects are proceeding in a way that is qualitatively different from historical practices that have governed staples development in the mineral sector. The very existence of EA, which, in addition to economic factors, requires consideration of the biophysical and socio-economic impacts of a proposed development, is a tangible illustration that Canada operates in a "new" staples economy, one that attempts to manage pressure on the resource sector, minimise adverse impacts, and balance the economic benefits of development on a spatial and temporal basis.

Notes

- The NWT and NU became separate territories, as per the Nunavut Final Agreement, on April 1st, 1999.
- Concerns associated with boards include that representatives are to serve as individuals, and as not representatives of appointment organisations, and boards serve an advisory, rather than decision making function.
- 3. The mine is now called EKATItm

- 4. Concerns regarding types of arrangements relate primarily to the process surrounding the negotiation of IBAs. Ritter (2001) notes that federal guidance is needed in terms of what issues the agreement should cover, the implications of these bilateral agreements on the public interest and the timing of IBA negotiations. For example, although "significant" progress in negotiation was a requirement of project approval, more than two years passed before BHP signed the final IBA. Furthermore, since agreements are signed with one group at a time, there is the potential for a "divide and conquer" strategy to be adopted.
- 5. As the DDMI EA was initiated three years after the WKSS was created, there was an increased opportunity to include research initiated through this institution in the review of the project. The comprehensive study report makes reference to on-going traditional knowledge research, including the Dogrib Treaty 11 study on place names, the Dogrib Treaty 11 study on caribou, and the Lutsel K'e Dene First Nation research on monitoring community health. However, given the timeline for this research, studies were not completed before the submission of the impact statement, or comprehensive study report
- 6. Although a coalition of Northern Environmental NGOs (Canadian Arctic Resources Council, Ecology North and Canadian Parks and Wilderness Society) were offered funding to participate in the assessment they declined the resources as being inadequate. Funding was later provided to CPAWS, and the Status of Women Council of the Northwest Territories.

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