UNDERSTANDING THE NEED FOR SUPRAREGULATORY AGREEMENTS IN ENVIRONMENTAL ASSESSMENT: AN EVALUATION FROM THE NORTHWEST TERRITORIES, CANADA

By

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ABSTRACT

Conventional environmental assessment (EA) is often considered the best approach for reducing negative outcomes associated with resource developments, though some critics remain sceptical of its fairness and effectiveness. In northern Canada, *supra*regulatory agreements, such as Impact and Benefits Agreements, are increasingly being used alongside EA for mineral developments. This thesis seeks to uncover the rationale for using these agreements among aboriginal and government stakeholders. Examining a case in the Mackenzie Valley, Northwest Territories, where these agreements have been used for three diamond mines, this research finds that supraregulatory agreements are a function of a number of deficiencies identified in EA process and design. Specifically, aboriginal and government stakeholders understand that EA does not consider benefits, employ adequate project-specific follow-up, and garner adequate trust or capacity amongst stakeholders. Recognizing this shortfall, these groups wish to negotiate supraregulatory agreements with companies to secure better outcomes where EA has traditionally failed.

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LIST OF ACRONYMS

CEAA	
CEA	
EA	
EIS	
GNWT	
IBA	
INAC	
IR	
NWT	
MVEIR	B or "the Board" Mackenzie Valley Environmental Impact Review Board
MVRM.	A Mackenzie Valley Resource Management Act
TK	
RWED	

1 INTRODUCTION

1.1 Research Context

This old lady was walking along, looking for berries and she found this gold rock. Later on, when a prospector saw this rock, he asked where she found it and said they wanted this rock. The old lady said, "No. You give me something then I will give it to you." He gave her three stovepipes for that rock. That's how the gold mines came to be here [in Yellowknife]. And our people did not benefit from that. ... As you see today, we walk around the arsenic that's left behind. Who's going to clean that up? (Interview transcript)¹

Resource development produces immense economic wealth but, as this Dene story illustrates, it is often coupled with abuse of local aboriginal people and significant environmental damage. Of particular concern is the impact of mineral developments on aboriginal renewable resource activities such as hunting. This legacy of abuse has created tension between aboriginal people and mineral developers exploring in aboriginal traditional territories. As more land claims are settled and self-government arrangements are employed, the conflict is beginning to lessen; however, the legacy of past behaviour ensures the possibility of further conflict, especially in regions where land claims are not yet settled.

Environmental assessment (EA) was established in Canada in 1973 (Boyd, 2003), well before the first comprehensive land claim was settled in 1977 (i.e. *The James Bay and Northern Quebec Native Claims Settlement Act*). Having emerged at the same time as natural resource "mega-projects" in Canada's hinterland regions, EA functions to address and, ideally, to prevent impacts associated with these developments. This goal is significant; as Boyd (2003) notes, EA remains one of the only formal mechanisms designed to avoid undesirable effects associated with resource developments. Furthermore, now that many land claim agreements have been settled in the Canadian North, significantly expanded powers in EA decision-making are given to aboriginal communities through local co-management arrangements (Gibson, 2002; Keeping, 1997; Rowson, 1997). These arrangements specifically reflect aboriginal concerns and needs, and are considered to represent a form of EA "best practice" (Armitage, 2004; Boyd, 2003; Donihee et al., 2000; Lawrence, 2003).

¹ This quotation has been modified from the original interview transcript. It was the intent of the author to improve clarity and reduce the quotation length without changing its meaning.

While many analysts remain optimistic about the advantages of this process, others identify a number of common limitations in EA design and practice. For example, many critics view conventional EA as inflexible and excessively narrow in its focus. Seeking to predict potential project impacts on natural and social systems, EA inevitably fails to identify all potential impacts of a development (Berkes, 1988); while those impacts that are identified, time horizons are typically too short (Mulvihill & Baker, 2001). This especially burdens certain populations that are more vulnerable to cumulative impacts, such as northern aboriginal populations (Bone, 2003; Tollefson & Wipond, 1998). Compounding this problem is the tendency of conventional EA designs to consult members of the public in ways that discourage alternative cultural conceptions (e.g. views of the utility of land) (Baker & McLelland, 2003; Edelstein & Kleese, 1995; Sallenave, 1994) and, worse, to exclude the general public in key steps of the process in favour of "experts" and bureaucratic elites (Freudenburg, 1986; Lawrence, 2003), the latter of which regularly display inappropriate discretionary power (Beanlands & Duinker, 1983). A further perceived limitation concerns the tendency for EA to favour process-oriented actions over product-oriented actions: that is, instead of favouring substantive goals of a particular EA (e.g. environmental protection or sustainability), it is common for an EA to simply comply with obligatory stages (Armour, 1991; Lawrence, 2003; Mulvihill & Baker, 2001). This practice has led Nikiforuk (1996) to regard EA as simply a tool to secure government authorizations and licences.

Of particular significance to this thesis are two further commonly expressed limitations of EA design and practice. The first relates to the *ex ante* nature of EA. Since EA decisions cannot account for events that take place during project construction and operation, these decisions are vulnerable to regular system change and surprise events (Holling, 1978; Noble, 2000). This understandable limitation would be acceptable if proponents and regulators explicitly linked EA findings and recommendations to *ex post* monitoring and follow-up, however, critics assert that this is seldom done (e.g. O'Faircheallaigh, 1999). The typical results of this failure are "surprises" that particularly burden communities that are near the site of development. This spatially inequitable burden is especially unjust given a second significant limitation of conventional EA: it does not address the issue of benefits. The EA process is designed to mitigate adverse impacts, but typically does not facilitate positive outcomes. This focus on potential negative aspects of a project merely allows for a

"best worst-case" scenario. In order to attain broader goals, it is necessary to design for gains and assess potential benefits (Gibson, 2000).

From these many criticisms and especially the latter two, it is apparent that conventional EA does not adequately address the needs of local communities and especially northern aboriginal populations in Canada (Edelstein & Kleese, 1995; Higgins, 1993; O'Faircheallaigh, 1999; Tollefson & Wipond, 1998). Perhaps it is no surprise then that northern Canada has been one of just a few locales where innovative contractual agreements between developers and local communities have increasingly been struck outside of, but alongside, the regulatory (EA) process. There are many examples of these supraregulatory agreements in Canada, many of which have been termed Impact and Benefits Agreements (IBAs). While these agreements serve as a prerequisite for project-approval in some instances, they are commonly negotiated and signed voluntarily between mining firms and aboriginal stakeholders and offer would-be oppositional communities guarantees on royalty sharing, employment, wider economic development opportunities, and greater protection of cultural, social, and environmental amenities in exchange for their support and cooperation (especially in the government permitting process). According to Ciaran O'Faircheallaigh, expert EA analyst, these legally binding agreements address several "aspirations and concerns of indigenous people" by ensuring that the results of EA "shape the outcomes" of resource developments (1999, 67). In other words, it is suggested that these agreements have arisen to make up for the perceived deficiencies of EA design and practice.

1.2 Research Aim, Question, and Objectives

This research seeks to empirically assess the supposition that the rise of supraregulatory agreements like IBAs can be tied to the deficiencies of EA design and practice. More specifically, the research responds to the following question: Why are aboriginal groups in northern Canada, and more exactly in a region known for its innovative "best practice" EA process, increasingly signing supraregulatory agreements with mineral developers? In order to answer this question, the following two research objectives are pursued: (1) hypothesize the rationale for supraregulatory agreements based on a review of the critical EA and environmental justice literatures; and (2) empirically assess this hypothesis in one region of northern Canada where supraregulatory agreements have been

signed between multinational mining companies and local aboriginal communities associated with three diamond mine developments.

1.3 Approach to the Research

In order to fulfil these two objectives, three tasks are necessary: (1) a literature review, (2) a program evaluation, and (3) a direct assessment aimed at confirming the findings derived from task two. These tasks are outlined below.

1.3.1 Literature Review

The aforementioned list of conventional EA limitations arises from a review of two key bodies of scholarship: the critical EA literature (e.g. Armour, 1991; Beanlands & Duinker, 1983; Gibson, 2000, 2002; Nikiforuk, 1997; O'Faircheallaigh, 1999; Rees, 1980; Sadler, 1996) and the environmental justice literature (e.g. Bullard, 1994; Bryner, 2002; Cutter, 1995; Edelstein & Kleese, 1995; Gagnon et al., 1993; Higgins, 1993; Jobes, 1986). According to the critical EA literature, traditional environmental governance is grossly flawed. The impacted public has grown to distrust the process and is calling for more certain outcomes. Complementary to the critical EA literature, the environmental justice literature outlines the historical and current impacts of development projects on marginalized populations. It is widely known that local adverse impacts may need to be tolerated for larger regional benefits; however, negative effects of resource developments in Canada tend to fall disproportionately on aboriginal populations, since they take place in regions populated by hinterland, largely aboriginal, communities. As discussed above, although EA is intended to reduce the localized impacts that are inevitable outcomes of resource development, many believe that EA cannot sufficiently offset the negative impacts disproportionately felt by local populations (Edelstein & Kleese, 1995; Jobes, 1986).

Based on this review of the critical EA and environmental justice literatures, this thesis proposes the following hypothesis: supraregulatory agreements are a function of EA deficiencies. Recognizing this shortfall, aboriginal groups and government wish to go beyond this traditional regulatory approach in order to secure certain processes and outcomes from resource development projects that EA does not adequately provide.

While this hypothesis appears self-evident, especially given O'Faircheallaigh's (1999) stated supposition, it is not rooted in empirical research. In fact, other authors have

proposed alternative rationales (e.g. Illsley, 2002; Keeping, 1999; Kennett, 1999a; Sosa & Keenan, 2001), which will be discussed in chapter three. It is understood by many authors (e.g. Klein et al., 2004; O'Reilly & Eacott, 1999-2000) that the relationship between EA and supraregulatory agreements is unclear, highlighting an apparent need to test this research hypothesis.

1.3.2 Program Evaluation

In order to "test" whether the rise of supraregulatory agreements directly stems from deficiencies of the EA process, a two-fold approach was developed. The first part of this approach requires a program evaluation. This program evaluation highlights the strengths and weaknesses of one EA process (i.e. the Mackenzie Valley Environmental Impact Review Board EA process), the findings of which are used to infer whether supraregulatory agreements are a function of EA deficiencies. The second part of the approach requires a direct interrogation of the rationale among key informants through interviews and will be discussed in subsection 1.3.3.

Traditionally used as an applied version of policy analysis, program evaluation has been proficiently employed in the field of resource and environmental management to evaluate EA (Patton, 2002; Sadler, 1996). According to social science researchers (e.g. Babbie, 2001; Pal, 1997; Patton, 2002), it is often helpful to consider the conceptual problems associated with the evaluation approach before a research design is created. As such, the following paragraphs aim to address these problems. Drawing from a number of authors (e.g. Bradshaw, 1994; Clarke & Dawson, 1999; Patton, 1987; Sadler, 1996), this subsection considers the following aspects of evaluation research: (1) the *intended use* of the evaluation (i.e. rationalize actions of actors); (2) the *aspects of the program* that will be evaluated (i.e. effectiveness), (3) the spatial and temporal *scales* at which the evaluation will take place (i.e. single case), and (4) the *social context* in which the evaluation takes place (i.e. institutional design is distinct from practice) and where the evaluator is situated (i.e. insider or outsider). The following paragraphs consider these factors as they relate to this research project.

As noted earlier, this research aims to uncover the rationale for supraregulatory agreements. According to Scriven (1967 in Patton, 1996), an expert in evaluation methods and credited for introducing evaluation types, there are two purposes for evaluation. These are formative and summative purposes. Both categories are defined by their instrumental

use, where the latter refers to evaluations aimed at making changes to the program and the former refers to evaluations aimed at making a conclusion or judgement for any other purpose (Patton, 1996). It is apparent that this two-category description of evaluation aims is not sufficient for the purposes of this thesis, which intends neither to make official recommendations nor to make a conclusion for an undefined purpose. Drawing from Patton's (1996) critical response to Scriven's original conception, summative evaluations should more specifically aim to generate knowledge to understand "policy formulation". According to Patton's interpretation, then, evaluation is a useful tool to help understand the processes and purposes that might formulate new governance tools like supraregulatory agreements.

The above subsection highlights the usefulness of evaluation research to help uncover the rationale for supraregulatory agreements. To fulfil this research purpose and, in particular, to highlight possible EA limitations that may give rise to these agreements, the evaluation considers EA effectiveness. According to Doyle and Sadler (1996, 23), "a well founded EA system" is "one that meets widely agreed objectives, principles, and criteria". Others state that evaluating program effectiveness requires the analyst to fulfill two objectives: (1) identify the program's intended or desired outcomes; and (2) compare these outcomes to the actual program outcomes (Patton, 2002; Rossi & Freeman, 1993). While there is no single method for evaluating effectiveness (Patton, 2002), the above authors argue that effectiveness should be measured by comparing an EA process to evaluative criteria. In this research, the evaluative criteria are conceived as ideal outcomes; that is, they are normative and are derived from a review of the critical EA and environmental justice literatures. These criteria are defined in chapter two.

There are advantages and disadvantages to devising original measurements when established criteria already exist (Babbie, 2001; Lasswell, 1971). While Sadler's (1996) *International Study of the Effectiveness of Environmental Assessment* is highly influential in EA effectiveness evaluation (e.g. Baker & McLelland, 2003), this research seeks to uncover particular knowledge for which these generic research measures are not specifically designed. The strength of using criteria that are more suitable to the research question is weakened by the considerable uncertainty that surrounds the validity of findings when using criteria that have not been tested beforehand (Babbie, 2001). In order to compensate for using untested criteria, the researcher makes use of multiple data collection techniques aimed at

corroborating research findings. Specifically, a second approach that does not rely on these criteria will strengthen the overall validity of these research findings.

A third consideration of evaluation research is spatial and temporal scales as they relate to the ability of the evaluation to be replicated. This evaluation adopts a single case study as its unit of analysis. It is understood that case study research findings often have greater accuracy, but have much less "representativeness" or have much less ability to be replicated (Babbie, 2001; Sayer, 1992). Based on this limitation, it would be most advantageous to complement the case study approach with an extensive research approach. Practical limitations associated with a Master's thesis (e.g. lack of time and financial resources) pose as barriers to using a large and random sample that is common to extensive research. Nonetheless, intensive research is a highly appropriate approach for understanding the rise of supraregulatory agreements.

Intensive research, such as case study research, can reveal causal relationships and interactions. Accordingly, intensive research is best suited to revealing the causal explanations for a particular event (Sayer, 1992). Given that the findings are most useful to help explain a particular event, why would conducting case study research be useful for explaining the rationale of supraregulatory agreements outside of the case study event? According to Patton, the use of case study in evaluation is highly appropriate in two instances: when there is an "unusually successful" case; and when there are only a few similar cases (1987, 26). While the findings cannot be reliably generalized to all possible cases, the case is strategically selected to render a strong conclusion that can be logically generalized (Patton, 1987). In other words, if it is concluded that supraregulatory agreements arise from the deficiencies of EA in a case where the process is considered better than others, then the researcher can state that since it happened here, it is likely to happen elsewhere.

Lastly, in order to conduct an accurate evaluation, it is important to acknowledge societal influences before selecting data collection tools. For the same reason, it is equally important to consider the role of the evaluator in relation to the case environment. As such, an evaluation should "continually assess the social ecology of the arena in which [the evaluators'] work" and how they relate to it (Patton, 1987; Rossi & Freeman, 1993, 406). Given this understanding of societal influences and the uncertainty that surrounds them, this evaluation makes use of interviews, document review, and observation. When using a single research technique, it is understood that findings will partly reflect the strengths and

weaknesses of that particular technique (Babbie, 2001). Using triangulation is an effective approach to addressing this problem because it allows the researcher to assess the consistency of findings generated by distinct data collection methods (Patton, 2002). The following paragraphs provide a brief summary of and rationale for using these three techniques.

Document review offers a basic source of "insider" knowledge (Clark and Dawson, 1999). Verbatim records of conversations, written communications, and secondary sources, like journalistic pieces, are often used to provide a glimpse into human action and in some cases interaction. Technical and legal documentation also provide significant information but are understood as a product of human action. As such, the evaluator should be aware that documents might be incomplete or unreliable (Babbie, 2001). To improve accuracy, it is often necessary to consult the document source and consider political motivations.

Anthropologists consider *observation* or, more accurately, participant observation and ethnography, as the "most significant qualitative methodology" (Ervin, 2005, 95). While structured and semi-structured interviews beg particular answers and require informants to select certain memories, observation reveals unexpected aspects of social actions. The evaluator is often embedded in everyday actions and might, in some instances, take on the role of an insider. By accepting this insider role, the evaluator may take part in social interactions and rituals in order to gain an understanding of the complex set of relationships working within the program (Herbert, 2000).

Key informant *interviews* provide more focused knowledge by using individuals who likely hold relevant knowledge. Patton defines key informants as "people who are particularly knowledgeable about the inquiry setting...[and] whose insights can prove particularly useful in helping an observer understand what is happening and why" (2002, 321). In this case, regulators, government stakeholders, and First Nation stakeholders that are involved in the EA process are interviewed. While the sample size need not be large, purposive sampling coupled with snowball sampling techniques may be used to select informants that represent different perspectives of the EA process, so a small cross-section of all potential informants are interviewed.

By triangulating the methods of data collection described in the above paragraphs, the researcher may adopt the role of an insider and an outsider and enjoy the benefits associated with each role (e.g. Clarke & Dawson, 1999, 23). These techniques have also been selected to gather data that describe both the design and practice of the EA process under evaluation

(Ervin, 2005). For instance, an official document or government informant may claim that the program proceeds as it was originally designed, whereas a series of emails on public record or observations may reveal that the program is practiced in a manner that is distinct from its original design. Given these distinct types of data, the EA process is evaluated for its effectiveness in both design and in practice, where design is defined by guiding legislation and practice is defined by informal actions.

1.3.3 Direct Assessment

Rather than infer a rationale for supraregulatory agreements based on identifying gaps in EA design and practice via a process evaluation, task three directly assesses the perceived rationale by asking key informants for their insightful knowledge concerning these agreements. In other words, key informants, and especially First Nation representatives, can describe the rationale directly. In this way, key informant interviews with First Nation and government stakeholders who have an understanding of supraregulatory agreements can function to verify the validity of the findings from task two (Patton, 2002).

As mentioned in the previous subsection, using interviews for intensive case studies is highly appropriate for revealing causal relationships and interactions for a particular event (Sayer, 1992). Accordingly, this research employs interviews to understand whether the rise of supraregulatory agreements stem from perceived deficiencies of the EA process.

1.4 Thesis Outline

This thesis follows in five further chapters. Chapter two undertakes a review of the critical EA and environmental justice literatures, highlighting a number of limitations associated with the EA process. Chapter three describes supraregulatory agreements and outlines the logistics used to undertake this research in Yellowknife, NWT. Chapter four describes findings from a program evaluation, which infers a rationale for the rise of these agreements. Chapter five describes findings from a direct assessment of the perceived rationale among key informants for the rise of supraregulatory agreements. And finally, chapter six concludes the thesis, highlighting the contributions of this research to scholarship and practice, and describing future research needs.

2 CRITICAL ENVIRONMENTAL ASSESSMENT AND ENVIRONMENTAL JUSTICE LITERATURES

2.1 Introduction

Environmental Assessment (EA) is a standard practice in resource and environmental planning and management in Canada, and has been since its inception over 30 years ago. While goals and approaches vary, the EA process basically aims to reduce adverse environmental and social impacts of proposed human actions and their alternatives by determining and managing potential impacts on the biophysical and human environments (Armour, 1991; Lawrence, 2003). EA, most significantly, is one of only a few formal processes designed to *prevent* adverse environmental and social impacts in Canada and throughout the world (Boyd, 2003). The Berger Inquiry is one case that is considered by many to be a "model of EA excellence" (e.g. Mulvihill & Baker, 2001; Nikiforuk, 1997, ii; Smith, 1993; Wismer, 1996).

Between 1974 and 1977 Justice Thomas Berger undertook a rigorous assessment of potential social and environmental impacts of an oil and gas pipeline proposed for the Mackenzie Valley in the Northwest Territories (NWT). Berger's EA process afforded considerable and genuine public participation and decisively recommended a 10-year postponement on any industrial development. He intended that the recommendation would allow time for aboriginal land claims to be settled, which, in turn, might allow future developments to generate lasting benefits for the aboriginal residents of the claim area (Berger, 1988; Nikiforuk, 1997, 4; Smith, 1993). Since the time of the Berger Inquiry, however, many have deemed the practice of EA in other instances in Canada less than satisfactory. Critics argue that the process has achieved limited success in satisfying impacted residents and preventing environmental and social impacts. Indeed, environmental critic Andrew Nikiforuk characterizes EA as "cynical, irrational and highly discretionary" (1997, i).

This chapter describes the general model of EA and its application in Canada as an introduction to a review of two bodies of scholarship: (1) the "critical environmental assessment literature", which is a fairly large and heterogeneous body of literature that

critically examines the EA process; and (2) the "environmental justice literature", which is a body of literature that highlights the tendency of environmental management and planning decisions to produce disproportionate burdens on minority groups. The review serves two purposes: (1) to identify the perceived deficiencies of EA design and practice, which help to explain the rationale of supraregulatory agreements; and (2) to facilitate the development of normative criteria, which are used to evaluate a critical case EA process.

The chapter proceeds as follows. Section 2.2 briefly introduces the EA process by describing its general design in Canada and highlighting its distinct practice in Canada's North. Section 2.3 introduces six EA limitations identified in the two reviewed literatures then discusses EA effectiveness by presenting two opposing schools of thought that are apparent in the critical EA literature. Section 2.4 reviews the environmental justice literature, focusing on the specific burden experienced by northern aboriginal groups in Canada relative to other groups. Finally, section 2.5 offers a summary and conclusion, which, in short, characterizes EA as flawed. EA is limited in its ability to satisfy the interests and needs of aboriginal people in Canada's North. While most contributors to the scholarship generally agree upon this conclusion, they diverge on the degree to which EA is inadequate; some scholars believe that the EA process can be fixed to address this problem, while others suggest that solutions lie outside the domain of the conventional EA model.

2.2 The Environmental Assessment Process in Canada

"The logic of Environmental Impact Assessment is to influence public decisionmaking by generating knowledge about external impacts of proposed projects" (Leknes, 2004, 1). EA recommends appropriate measures "to encourage more environmentally sound and publicly acceptable actions" (Steinemann, 2001, 3). Many EA practitioners and critics feel that these statements sufficiently define the principles of EA (e.g. Alton & Underwood, 2003; Leknes, 2001; Sadar, 1997; Steinemann, 2001). Other analysts contend that EA should strive for more substantive goals like sustainability (Gibson, 2000, 2001; Goodland, 1995; Smith, 1993), social learning (Armitage, 2004; Sinclair & Diduck, 2001), and environmental awareness among bureaucrats (Wilkins, 2003). Acknowledging the diverse goals of, and approaches to, EA, this section describes eight steps that represent a typical "project specific" EA process (i.e. the most common EA type that assesses single project proposals like those for a mine or an airport) conducted in Canada. These general steps are illustrated in Figure 2.1.



Figure 2.1: The general stages of an environmental assessment process. Adapted from Wood, 2003, 6.

- 1. *Consider alternatives:* The first general step in EA requires a critical examination of alternative means for project development. Alternatives range from reconsidering project design to questioning project objectives. The latter is seldom done (Mitchell, 2002).
- Action Design: The second step determines the assessment design and its necessary actions. This design reflects the proposed project type and the jurisdiction in which the proposal falls. EA design is often detailed in legislation and process guidelines (e.g. *Canadian Environmental Assessment Act*, S.C. 1992; MVEIRB, 2004a).

- 3. Screen: The third step in EA involves a preliminary screening of the potential adverse impacts and a determination of their significance. At this step, the proposal is submitted to the "responsible authority" (i.e. the organization that often conducts the screening and is responsible for issuing the necessary permit, license, or authorization). This authority may forward the project proposal to a more rigorous type of assessment if it is required by relevant legislation and regulations. For instance, Canada's federal process, as enshrined in the Canadian Environmental Assessment Act (CEAA), may require the Department of Fisheries and Oceans as the responsible authority to conduct a screening assessment when a proposed project requires an authorization under the Fisheries Act (S.C. 1992; S.C. 1985). Upon completion of the screening assessment, the proposal is either approved (as most projects are at this stage) or forwarded to a more rigorous level of EA, depending on the type of project and, in some cases, degree of local concern (e.g. regulations pursuant to the Canadian Environmental Assessment Act (S.C. 1992) require certain project types to be forwarded, while the Mackenzie Valley Resource Management Act (S.C. 1998) requires proposals to be forwarded when there is the potential for a significant adverse impact or public concern).
- 4. Scope: The fourth general step "scopes" the assessment by narrowing all potential impacts under assessment to only those that are relevant. For instance, CEAA requires that every assessment shall at least consider, "the environmental effects of the project", which is defined as "any change that the project may cause in the environment" or any effect of any of these changes on health or socio-economic conditions and cultural or heritage structures (S.C. 1992, s. 16(1)(a)). Other processes in Canada, however, differ in the breadth of issues under assessment. For instance, the Nunavut Land Claims Agreement Act (S.C. 1993) assesses a broad set of issues including direct social impacts, while the British Columbia Environmental Assessment Act is relatively narrow and excludes social impacts altogether (S.B.C. 2002).
- 5. Prepare EA report: The fifth step requires that an Environmental Impact Statement (EIS) is prepared. Usually, these are devised by the proponent and submitted to the responsible authority or an independent panel designated to review and make recommendations on the report. This report presents the proponent's methods used to predict potential impacts of the proposed development and their findings. Based on these predictions, the report will often assess the degree of significance for each impact and present the most desirable project plan.

- 6. *Review EA report:* As illustrated by the arrows in Figure 2.1, each of these steps interact and influence one another. This is especially significant for public consultation, which helps to shape all steps during a single EA. (Authorities may use public input to scope relevant issues, the proponent may consult the public on impact significance, and the public is occasionally asked to help monitor project impacts.) The public consultation phase is most intense during the report review stage, where the general public, relevant authorities, and other relevant stakeholders assess the EA report and submit their comments.
- 7. Make a decision: Once reviewer comments are submitted, the seventh step requires the responsible authority or independent panel to review the report and ensure that potential impacts have been adequately identified and evaluated so they can be incorporated into a recommendation and final decision. Ultimately, EA authorities (e.g. a designated panel or responsible Minister) weigh the impacts of a potential development and recommend a decision: a "go" or "no-go" (Sinclair, 1997). A final decision typically the legally binding decision that incorporates the recommendations from the responsible authorities or the panel is usually made by the Minister who is responsible for the type of authorization issued for the development.
- 8. Monitor Impacts: The last step in EA requires responsible authorities to monitor project impacts. In Canada, the stages preceding the final decision are merely advisory in nature (i.e. the recommendations made are not legally binding), so it is usually up to the responsible authority who issues the authorization to include all of the EA recommendations in this authorization and subsequently monitor proponent compliance with this authorization. This stage is sometimes considered external to the EA process, especially in a Canadian context. To stay consistent with the critical EA follow-up literature, this dissertation treats monitoring and follow-up as an expected last stage of EA.

Building upon the foundations of project-specific EA, alternative types are often applied for broader assessments. For instance, strategic environmental assessment is designed to assess potential impacts of changing policies, programs, and plans (Noble, 2002). Cumulative effects assessment acknowledges the potential for adverse impacts to surface after they accumulate over time and space (Tollefson & Wipond, 1998). And, adaptive management acknowledges uncertainty in predicting future impacts, allowing for resilient

plans (Noble, 2000). Even methods within project-specific EA vary (e.g. Morris & Therivel, 1995).

Project-specific EA is the most common type of EA in Canada, but its use in Canada's North often incorporates a much broader geographical, temporal, and issue scope than most other project-specific EA. Appropriately, northern EA is considered to be more closely associated with strategic environmental assessment and cumulative effects assessment than project-specific EA elsewhere in Canada (Sadler, 1990). In short, the "practice" (i.e. informal actions) of EA in Canada's North has almost always been distinct from that of the rest of Canada. However, the federal EA "design" (i.e. legislative requirements) has been applied uniformly throughout northern territories until recently. To highlight this distinction between practice and design, the following paragraphs review the evolution of EA policy and legislation in Canada and EA practice in Canada's North, the latter of which is demonstrated by the Berger Inquiry and subsequent examples.

Before the introduction of EA in Canada, resource developers were allowed to effectively ignore adverse impacts associated with resource developments. Many Canadians viewed the North as a resource-rich frontier, a perception that was manifested in the 1970s when an increasing number of "mega-projects" developed in Canada's northern regions. These developments were believed to be the "only viable economic option to an apparently 'impoverished and unproductive' aboriginal population" (Usher, 1998, 385). Critics began to question the merit of these projects when it became clear that aboriginal lifestyles and livelihoods and the natural environment were being threatened by poor environmental practices. Combined with a new environmental awareness among the Canadian public, a new political climate was cultivated and ready for change (Usher, 1998).

The Environmental Assessment and Review Process (EARP) was established in 1973, four years after the inception of EA in the United States, representing the first EA process in Canada. After EA was established in Canada, two important precedents were set the first in practice and the second in legal design.

The first precedent is attributed to Justice Thomas Berger. Appointed by the then Minister of Indian and Northern Affairs, Jean Chrétien, Berger conducted a broad assessment of the potential impacts associated with the Mackenzie Valley Pipeline project proposal between 1974 and 1977. Receiving much national attention, this assessment provided aboriginal people living in the North with a unique opportunity to voice their opinions while

the rest of Canada was listening. Northerners demanded that government recognize aboriginal rights described in so-called "historic" aboriginal Treaties as well as the urgent need to preserve the unique cultures of the North. The Inquiry concluded that industrial development could only accrue lasting benefits for aboriginal people in Canada's North if land title and rights were settled through a land claims process (Berger, 1988). Berger's assessment set the precedent for meaningful EA that some critics assert has not been matched since (e.g. Mulvihill & Baker, 2001; Smith, 1993; Wismer, 1996).

The high standards set by the Berger Inquiry partially lay in its openness to aboriginal participation, combining formal and informal hearings, authorizing participant funding, and translating dialogue and documents into local languages. The assessment also addressed a broad scope of issues; that is, Berger was concerned with the local economy and broad social and cultural goals for aboriginal people in the North (Couch, 2002; Gamble, 1978; Mulvihill & Baker, 2001). In 1977, he recommended a moratorium on all industrial development to help facilitate a renewable resources economy, strengthen cultural practices, and carefully develop a mixed economy (Mulvihill & Baker, 2001).

Other critics feel that Berger established a norm that subsequent northern EAs have followed (e.g. Donihee & Myers, 1990). For example, the Yukon's Shakwak Highway Project (1978) addressed social impacts and facilitated participation through intervener funding. The NWT's Eastern Arctic Offshore Drilling (1978) adopted a regional approach, emphasized contingency planning, and community participation. The NWT's Arctic Pilot Project (1980) emphasized local benefits and monitoring for impact management and the Norman Wells Oilfield Development (1981) created local training opportunities (Sadler, 1990). The Beaufort Sea EARP (1980-84) equally considered social and biophysical impacts, addressed a broad geographical scope, and made recommendations for policy changes. This EA, however, received mixed reviews; decision makers were reluctant to address social impacts and land claims (Mulvihill & Baker, 2001; Sadler, 1990) and the 30,000 pages that accumulated over a 4-year period typified the northern process as "frustrating, time-consuming, and expensive" (Donihee & Myers, 1990, 157; Sadler, 1990).

Northern EAs have always been different from those undertaken in the rest of Canada, owing not only to the historical precedent, but also the unique geographical characteristics. EA practice is generally characterized by the nature of the development and the geography under assessment. Northern developments are generally mega-projects

proposed for sparsely populated, underdeveloped, and sensitive areas. Southern investors, contractors, and itinerant workers often gain benefits associated with the project over local residents. EA practice in the North, then, often considers regional development strategies for the North. In fact, the public generally expects that an EA in this region will address a broad scope of issues like social impacts, cumulative effects, and equity concerns (Mulvihill & Baker, 2001). Since developments are infrequent and population is low, EAs tend to grab the attention of everyone in a region (Couch, 2002). Though project-specific in their initial aim, northern EAs have qualities similar to strategic environmental assessment, cumulative effects assessment, and regional planning (Couch, 2002; Mulvihill & Baker, 2001).

The second key precedent in Canadian EA was set by the courts in 1992. At this time, an Albertan environmental group challenged the federal Ministry of Transport in the Supreme Court of Canada for the discretionary application of EA under the new *Canadian Environmental Assessment and Review Process Guidelines Order*. The courts held that the federal government was legally bound to apply this Order broadly (Friends of the Oldman River Society v. Canada (Minister of Transport), 1 S.C.R. 3. [1992]). In response to the newly invoked *Guidelines Order* as well as widespread criticism, the federal government decided to replace EARP and proclaimed the Canadian Environmental Assessment Act (CEAA) in 1995 (Boyd, 2003, 148). Federal EA is now overseen by the Canadian Environmental Assessment Agency. Proponents of CEAA contend that EA is more "efficient, effective, fair and open" (Wood, 2003, 71). At the same time, many critics of CEAA claim the process has improved little since 1995 (Boyd, 2003).

CEAA applies to all physical project proposals (e.g. a mine, dam, or pipeline) or activity proposals (e.g. low-level military flying) that either require federal permits, receive federal funds, take place on federal land, or are executed by the federal government (the latter of which does not include government programs and policies that are assessed by the *Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals* (CEAA, 2004)).

In addition to the federal CEAA, there are believed to be over 200 separate EA processes in Canada (Ross, 2000 in Wood, 2003) established by various authorities, including provinces. Provincial EA law tends to be weaker and more discretionary than federal EA law. The provinces, most notably Alberta, Ontario, and British Columbia, employ the policy when it does not pose a threat to provincial economic interests (Boyd,

2003). For example, oil and gas is exempt in Alberta, logging is exempt in British Columbia, and the entire private sector is exempt in Ontario (*Environmental Assessment Act*, S.B.C. 2002, s. 3(a); *Environmental Assessment Act*, R.S.O. 1990, s. 3, *Environmental Assessment (Mandatory and Exempted Activities) Regulation*, Alta. Reg. 111/93).

Like provincial EA, Aboriginal land claim agreements have established special assessment arrangements unique to each settlement region. The first comprehensive land claims settlement in Canada under *The James Bay and Northern Quebec Native Claims Settlement Act* (S.C. 1977) allows both Cree and Inuit representatives to sit on a number of co-managed committees responsible for evaluating and reviewing proposed developments. Unlike provincial EA, processes established under land claim agreements tend to incorporate more local knowledge and make decisions that reflect longer-term interests in project outcomes (Boyd, 2003).

Given that the practice and design of EA in Canada and northern Canada have gone through significant positive changes since 1973, many optimistic scholars believe EA is improving and will one day fulfil stakeholder needs (e.g. Armour, 1991; Meredith, 1992). Some suggest that this will be achieved by pursuing sustainability through EA (e.g. Gibson, 2000; 2001; 2002). Others argue that the building blocks of the EA model can never fulfil broader stakeholder requirements, let alone pursue sustainability (e.g. Nikiforuk, 1997; Wismer, 1996). This diverging opinion within the critical EA scholarship is apparent and is discussed in the following section.

2.3 The Critical Environmental Assessment Literature

Robert Gibson (2002, 160), expert analyst of Canadian EA, notes that EA has improved over the past 30 years and has the potential to achieve, what he calls, "advanced" environmental assessment. At its inception, EA was a top-down, reactive regulatory procedure. EA simply aimed to control the effects of identifiable and local problems, addressing them as "technical matters" and requiring the polluter to act as they saw fit. At Gibson's imminent "advanced environmental assessment stage", decision-making and planning will be integrated in order to attain sustainability². EA will be "devoted to empowering the public, recognizing uncertainties and favouring precaution, diversity,

² Gibson defines sustainability in another work as "beyond minimizing damage". Actions that comply with sustainability must "make positive contributions to improving ecological and community conditions for the long term" and "should maximize durable net gains" (2000, 43).

reversibility, adaptability", and take a decisive role in promoting sustainability (160). While most analysts, including Gibson, understand that EA has yet to achieve the status of advanced environmental assessment, many critics stress that the EA model is one of "the most efficient ways of optimising" the outcome of development projects (e.g. Armour, 1991; Gibson, 2002; Meredith, 1992, 125; Noble, 2002).

Gibson maintains that there is considerable momentum pushing EA towards this enlightened stage. He outlines nine areas of improvement that have contributed to this momentum over the last 30 years (2002, 153):

- EA occurs earlier in planning stages;
- EA is more open and allows for more participation from all stakeholders;
- EA is more comprehensive (not exclusive to biophysical effects, single developments, and local impacts);
- EA is more mandatory and based in legal processes;
- EA is monitored more often by courts, informed public, and government auditors;
- EA is more widely applied through law at many levels (including voluntary initiatives);
- EA is more integrative and considers systemic effects;
- EA considers sustainability not just individually "acceptable" undertakings; and
- EA recognizes and addresses uncertainties and applies precaution.

Greater use of innovative EA methods has further contributed to this forward momentum. For instance, strategic environmental assessment emphasizes broader goals by analysing the potential impacts of changing policies, programs, and plans (Noble, 2002). Sustainability can be addressed at this broader scale and subsequently inform conventional project-driven EAs. Cumulative effects assessment broadens the scope of EA by acknowledging the potential for adverse impacts to surface after they accumulate over time and space (Tollefson & Wipond, 1998). Adaptive management acknowledges uncertainty and allows for more resilient plans even after the project moves into its operational stages (Noble, 2000). Environmental justice³ – as enshrined in the *National Environmental Policy Act* (U.S.C. 1969) in the United States – facilitates participation among diverse groups and focuses mitigation measures on potential impacts that disproportionately affect minority populations (Bass, 1998). While Canadian policy does not explicitly acknowledge

³ "Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies" (Environmental Protection Agency, 2004).

environmental justice, a number of jurisdictions do address cumulative impacts, adaptive management, strategic assessments, and public participation, and assert the goal of sustainability.

Other innovative approaches to EA emerge from land claim settlements. For example, the *Gwich'in Land Claim Settlement Act* (S.C. 1992) and *Sahtu Dene and Métis Land Claim Settlement Act* (S.C. 1994) established the co-managed Mackenzie Valley Environmental Impact Review Board (MVEIRB), which might provide one example of an improved EA regime. Like a CEAA panel review, MVEIRB leads all EAs that take place within the Mackenzie Valley, Northwest Territories (NWT) by providing EA guidelines, undertaking EA reviews, and making recommendations to government decision makers. According to the MVEIRB's guidelines, this regime emphasizes the use of local traditional knowledge while favouring precaution and rigorous methods in pursuit of sustainability (MVEIRB, 2004a; 2001). These and similar EA regimes only appear in land claim settlement areas, but seem to demonstrate how EA is able to move closer to Gibson's advanced environmental assessment stage.

In contrast to the optimistic view of Gibson and others, some EA critics believe that there is the need to move beyond the conventional EA model (e.g. Gagnon et al., 1993; Nikiforuk, 1997; O'Faircheallaigh, 1999). For these critics, EA will never satisfy the needs of all stakeholders because the fundamental building blocks of EA are its inherent limitations (Rees, 1980). Since the EA process will not simply evolve into advanced environmental assessment it must radically transform into a new model to effectively prevent adverse impacts associated with project developments. The following paragraphs in this section discuss six broad limitations in EA practice and design identified by these critical scholars with a particular focus on Canada's North. These limitations more closely refer to significant gaps in the EA process, which might prevent the arrival of Gibson's advanced EA. These limitations are summarized in Table 2.1 and discussed below.

Table 2.1:Limitations of Conventional Environmental Assessment.
Devised from a review of the critical environmental assessment and environmental
justice literatures, these six deficiencies of EA act as limitations to meeting Gibson's
advanced environmental assessment.

Narrow and Inflexible Scoping	o	Ignores potential for system change
	o	Considers irrelevant, short-term, biophysical, and local impacts
Exclusionary Methods	o	Procedures are top-down
	o	Draws mostly on experts
Process over Product	0	Technical, bureaucratic, remote from community
	o	Goals are weak and vague
	0	Tool to achieve EA certificate, government licences, and permits
Discretionary Decisions	0	Driven to a "go" decision
	o	Driven by political interests
	0	Failure to enforce and feed EA into follow-up
Token and Restrictive	0	Dominant worldview valued over aboriginal worldview
Consultation	٥	Consultation not always integrated
Excludes Benefits	0	Design flaw ignores potential for positive benefits
	¢	Focus on "best worst-case" scenario ignores potential for broad goals

First, conventional EA design tends to be narrow and inflexible. This is especially true of scoping, which is one of the most entrenched phases of EA. This early phase seeks to predict the range of potential project impacts on natural and social systems by assessing baseline conditions and project plans (Beanlands & Duinker, 1983). Predicting impacts, however, fails to identify all potential impacts of a development because it cannot foresee surprise events that inevitably take place (Berkes, 1988). This inherent design flaw is further impaired by the tendency of practitioners to focus on short-term and direct impacts that can be more easily measured than long-term and indirect impacts (Mulvihill & Baker, 2001). The practice and design of scoping, then, tend to produce inflexible and brittle project plans that are vulnerable to system change and surprise (Holling, 1978; Noble, 2000). In fact, the narrowness of scoping unfairly burdens certain populations that are most vulnerable to long term, regional, and cumulative impacts, such as northern aboriginal people (Bone, 2003; Tollefson & Wipond, 1998). On the other hand, scoping is also criticized for the practitioners' inclination to predict all measurable environmental impacts, instead of only those impacts relevant to stakeholders (e.g. valued ecosystem components) and decision makers (e.g. significant adverse impacts) (Sadler, 1996). This criticism is particularly problematic for proponents who complain that EA demands too much time and too many resources (Lawrence, 2003).

Conventional EA design also draws upon methods that tend to exclude the general public. Methods used in EA are typically expert-oriented and discount interdisciplinary and

participatory approaches (Freudenburg, 1986). Decision makers tend to drive EA from the top-down, where centralized organizations such as federal or provincial governmental agencies determine the appropriate methods. While local knowledge and decision-making arguably allows for EAs that are more relevant to impacted communities, top-down management approaches are often selected over local or indigenous approaches (Mulvihill & Baker, 2001). In effect, traditional ecological knowledge and public commentary are not readily integrated into EA findings (Sallenave, 1994). Furthermore, many EA designs do not always require practitioners to disclose their methods, leaving the general public and even decision makers unaware and unable to assess the accuracy of EA findings (Lawrence, 2003).

The third key limitation of EA arises from the tendency of practitioners, decision makers, and judicial bodies to favour process-oriented practices over product-oriented practices. By favouring procedure, commitments to broad and rigorous goals like sustainable development and environmental justice are discouraged. In case law, a distinction is often made between procedural steps that an EA is required to follow and substantive goals that an EA is required to seek, where an EA procedure is "required to be done correctly" and a broader EA goal is "required to be done reasonably" (Northey & Tilleman, 1998, 191). Accordingly, an EA complies with the law if it fulfils the following procedures: it is applied when triggered by the correct action; it is carried out according to the required process; and the necessary alternatives are considered (Northey & Tilleman, 1998, 192). Influenced perhaps by the legal process, EA practitioners and decision makers also highlight the importance of EA procedure rather than goals (Armour, 1991). Substantive issues are more likely to be incorporated when pressure from the media, the general public, or impacted groups is strong or even hostile (e.g. Gagnon et al., 1993; Morrison-Saunders et al., 2001). As a result, the goals of an EA are rarely emphasized or even stated in the EIS, terms of reference (TOR), or reasons for decision. When they are mentioned, they tend to be weak and oftentimes vague (Armour, 1991). Instead, EAs generally focus on complying with the minimum EA procedural requirements and discount more substantive goals. As a result, environmental impact statements (EIS) tend to be treated as an end in itself rather than a guide for achieving project goals (Lawrence, 2003; Mulvihill & Baker, 2001). Often considered a necessary bureaucratic process, EA often functions simply as a means to secure government funding, authorization, and licences (Nikiforuk, 1997).

Of particular significance to this thesis is the fourth limitation of EA. The discretionary nature of decision-making in EA is characterized by vague legislation, a political bias for a "go" decision, an absence of mandatory follow-up requirements, and a failure to feed EA decisions into follow-up stages. The first discretionary aspect of decisionmaking in EA arises from vague legislation, which allows decision makers and proponents to loosely interpret their responsibilities (Boyd, 2003; Nikiforuk, 1997). For instance, CEAA authorizes two goals, "a healthy environment" and "a healthy economy", which can sometimes conflict (S.C. 1992, s. 4.1). Oftentimes it is in the interests of the decision-maker to favour the decision that will encourage "a healthy economy" over "a healthy environment" and, as a result, decision makers are often blamed for giving in to the "inertia of the drive for rapid natural resource and energy development" rather than to the interests of environmental protection (Justus & Simonetta, 1982, 239; Kuhn, 1997). Even when independent panels make recommendations to decision makers, it is fairly well known that politicians influence key recommendations with their own agendas (Nikiforuk, 1997, 6). This is particularly the case in regions that are considered economically depressed like Newfoundland and Canada's northern territories (Sinclair, 1997). For example, the proportion of project proposals submitted and approved under CEAA was 99.9% between 1995 and 2000 (Boyd, 2003, 152).⁴ Indeed, many critics believe that a "go" decision is understood even before entering the assessment process (Sinclair, 1997). This might be influenced in part by the inherent bias of self-assessment, an approach widely used in Canada that allows the proponent to identify the potential adverse impacts associated with their development (Boyd, 2003; Sadler, 1996).

A third discretionary aspect of EA decision-making is the absence of mandatory requirements enforced by legislation (Boyd, 2003). For instance, CEAA only requires the responsible authority to "consider whether a follow-up program for the project is appropriate in the circumstances" (S.C. 1992, s. 38.1). Decision makers are also granted the authority to approve projects that have significant adverse impacts, if they are "justified in the circumstances" (S.C. 1992, s. 37.1(ii)). A further criticism stems from the "lack of continuity" from EA recommendations to legally binding authorizations (Couch, 2002; Sadler, 1990). There is an "almost total failure to address the issue of how the findings and recommendations generated by impact assessment can be effectively fed into the decision-

⁴ This statistic does not take into consideration the proportion of proposals that have been submitted and subsequently withdrawn. Proposals are commonly not submitted or withdrawn from the process if they are deemed unfeasible.

making process" (O'Faircheallaigh, 1999, 67). Canadian EA is often criticized for this and, consequently, is often considered an advisory process that is complete once recommendations are submitted (e.g. Couch, 2002; Donihee & Myers, 1990). This failure undermines the goals of adaptive environmental assessment and management, which aims to manage impacts during project operation (Holling, 1978; Noble, 2000). All of these aspects contribute to the problem of overly discretionary decision-making. This problem particularly burdens aboriginal people impacted by resource development, especially those aboriginal groups wishing to settle land claims. Not only are decisions to develop areas traditionally used by aboriginal groups concluded without the consent of these groups, but also the decisions to develop these areas prevent aboriginal group(s) from claiming title to those areas in land claims negotiations (Baker & McLelland, 2003).

Arising out of an absence of meaningful public participation in EA, the fifth key criticism of EA highlights the lack of meaningful integration of aboriginal consultation in the top-down approach to decision-making. The process has been criticized for its inability to integrate data that are generated from aboriginal consultation into the process in a meaningful way. An EA that does not meaningfully integrate these data gives rise to an assessment that effectively ignores unique aboriginal interests and needs. As it is outlined in the next section, it is necessary to integrate these interests and values because they are unique (Craig & Tester, 1982, 25; Higgins, 1993; Mitchell, 2002). Even when public participation is encouraged, the public often lacks financial resources and access to technocratic forms of knowledge, skills, and accessible guidance documents (Craig & Tester, 1982; A.J. Sinclair & Diduck, 2001, 132). As a result, the process tends to favour parties with these resources thereby enforcing a dominant worldview, where land, among other potentially valued ecosystem components, is valued for its market value over other potential values (Kuhn, 1997). This is especially problematic for aboriginal residents who value particular land and ecosystem components for their cultural and spiritual significance rather than their market value (Baker & McLelland, 2003; Edelstein & Kleese, 1995; O'Faircheallaigh, 1999; Sallenave, 1994). As a result, "the right to use the land supersedes the right to imbue land with sacred meaning" in a typical EA process (Edelstein & Kleese, 1995, 29). Analysts often argue that one way to reduce this inequality is to allow for a greater degree of participation by the aboriginal public in decision-making (e.g. Higgins, 1993; Justus & Simonetta, 1982; Mitchell, 2002). Conventionally, however, only a token degree of participation has been allowed in an EA

process (O'Faircheallaigh, 1999). Further impairing meaningful participation, EA decisions are often made in a top-down manner; that is, authorities that make final decisions reside outside of the place under consideration. This problem is magnified in Canada's northern territories. While provincial governments are primarily responsible for EA in regions south of 60° Latitude, bureaucrats and politicians in Ottawa have made resource management and planning decisions for Canada's northern territories. Critics have long argued for "northern residents and their government to design their own project review and assessment process" so "northern people and their governments [have] real control over these developments" (Donihee & Myers, 1990, 66). Only recently have a number of resource management decision-making responsibilities been devolved to those residing in northern Canada, even though the Minister of Indian and Northern Affairs (the final decision-maker in many large resource projects proposed for northern Canada) continues to reside in Ottawa.

A last key criticism of the EA process arises from a significant gap in its design. The EA process is specifically designed to mitigate adverse impacts. As such, the process does not have any formal mechanism to maximize benefits. This focus on potential negative aspects of a project merely provides decision makers with the "best worst-case" scenario (Noble & Storey, 2005). In order to attain broader goals, like sustainability and environmental justice, it is necessary to consider "how to design for gains and how to assess potential benefits" (Gibson, 2000, 46). This objective appears feasible for project-specific EA; in fact, some other types of EA, such as strategic EA, commonly address benefits (CEAA, 2004). Like the other six limitations, the absence of consideration of benefits in EA particularly affects aboriginal people living in Canada's northern hinterlands. This population is more likely to experience adverse effects associated with resource development than it is to experience positive effects (Usher, 1998). This inequality is reflected in the NWT's economic history of underdevelopment and will be discussed in more detail in chapter three when the research case study is introduced. While the unequal distribution of benefits is well established in environmental justice scholarship, the relevance of this issue to the EA process is less obvious. In fact, most EA models do not even consider benefits, let alone make recommendations that address benefits. From an aboriginal perspective, however, benefits have always been a key issue in all EAs. In fact, land claims and their associated benefits are brought up in almost every assessment (MacLachlan, 1984).

In a review of the Beaufort Sea EARP, Sadler (1990) highlights the manner in which the process ignored discussions concerning land claims and land title. It is often assumed that these discussions take place in other forums and, by consequence, should not be discussed in an EA forum. The author disagrees, "land title is the context within which indigenous peoples assess the benefits and costs of pending change and is inextricably woven throughout all discussion of northern development" (30). Indeed, the aboriginal groups that participated in this EARP "found it impossible to talk about the future plans of others without being able to refer to their own [future plans]" (MacLachlan, 1984, 8). And, if a group has not settled a claim, these plans almost exclusively involve negotiating land claims.

A long history of mega-project developments has left a legacy of environmental destruction and social erosion for many aboriginal communities of the North (Berger, 1988; Bone, 2003). Notwithstanding the inception of environmental assessment in 1973, these environmental and social impacts continue to unfairly burden aboriginal people. In fact, EA contributes to this burden by not only its ineffectual mitigation of adverse impacts associated with resource developments, but also its creation of a procedural inequity that discriminates against aboriginal values, knowledge, and skills (Mulvihill & Baker, 2001). Consequently, aboriginal people in Canada are dissatisfied with the process and approach EA with "cynicism and even hostility" (O'Faircheallaigh, 1999, 64; Rees, 1980). Conflict between aboriginal groups, proponents, and regulators is entrenched and has the potential to further reduce EA effectiveness (Nikiforuk, 1997; O'Faircheallaigh, 1999; Rees, 1980).

The inequality that is apparent in the EA process should not be confused with tradeoffs, where local adverse impacts are tolerated for larger regional benefits (Bowles, 1981; Higgins, 1993; Jobes, 1986; Justus & Simonetta, 1982). EA will never have the capacity to offset all of the negative impacts felt by local populations (Craig & Tester, 1982). The problem is, however, EA is not offsetting these impacts sufficiently and, as a result, aboriginal groups are not satisfied with the current regulatory process (Illsley, 2002; O'Faircheallaigh, 1999). New forms of governance that act outside of the formal EA process have the potential to secure more desirable outcomes (O'Faircheallaigh, 1999; Smillie, 2002; Sosa & Keenan, 2001). At present, government and company consultation and temporary arrangements with aboriginal groups are the most common approach used to address benefits during project planning where land claims are not settled in the NWT (Keeping, 1997).
Where land claim agreements have been settled, however, co-management arrangements provide greater control to aboriginal community members (Rowson, 1997). Land claim agreements have also given rise to arrangements that appear to address the need to maximize benefits associated with resource developments. For instance, the *Nunavut Land Claims Agreement Act* (S.C. 1993) and the *Western Arctic (Inuvialuit) Claims Settlement Act* (S.C. 1984) address training and employment opportunities for their members through "Inuit Impact and Benefits Agreements" and "Co-operation Agreements", respectively. Indeed, these arrangements may have the potential to avoid many aspects of the EA limitations discussed so far (Baker & McLelland, 2003; Boyd, 2003; Lawrence, 2003). These novel arrangements are discussed in more detail in chapter three.

2.4 The Environmental Justice Literature

As illustrated in the previous section, many northern aboriginal residents perceive EA in a negative manner. This group often feels that the process neither sufficiently offsets negative impacts nor increases the amount of benefits associated with resource developments (Edelstein & Kleese, 1995; Jobes, 1986). Does northern EA have the potential to distribute impacts and benefits in an equitable manner? And does northern EA have the potential to create a fair participation process for making decisions associated with natural resource development? In order to answer these questions, it is appropriate to explore northern EA from a perspective that weighs equity and fairness; that is, it is appropriate to explore northern EA from an environmental justice perspective. This section outlines the development of this approach, explains its relevance to aboriginal northerners, and then describes the basic theoretical background of environmental justice by focusing on those aspects that are appropriate for exploring northern EA.

Having emerged 30 years ago from a grassroots movement and subsequent academic research (Higgins, 1993), environmental justice united the concerns of the civil rights movement and the environmental movement for the first time (Camacho, 1998). In 1972, residents of a primarily African American, low-income community in Warren County, North Carolina, protested against a decision by the U.S. Environmental Protection Agency to locate a PCB disposal site in their County. While the protestors did not prevent the noxious site from locating in this area, the event is often considered key to galvanizing the environmental justice movement (e.g. Bullard, 1994; Krakoff, 2002; Sandweiss, 1998). Research since that

time has primarily been devoted to assessing distributional and procedural equity concerns over locating hazardous waste sites in urban, low-income, and primarily African American communities in the southern United States. The body of scholarship, while still primarily about this topic, has expanded its scope to consider broader definitions of justice and other disadvantaged groups like women, aboriginal communities, and future generations (Fletcher, 2003).

The U.S. Environmental Protection Agency (USEPA), which now houses the Office of Environmental Justice, defines this concept as follows:

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies (USEPA, 2004).

While the USEPA limits environmental justice to "race, color, national origin, or income", this definition does not fully encompass the injustice felt among aboriginal people in Canada's North. The distinction between aboriginal groups and other Canadians is a "political classification"; that is, aboriginal people in Canada are distinct from other Canadian minority groups through their unique legal status (Suagee, 2002, 227). This distinct aboriginal classification does not limit the usefulness of environmental justice in helping us understand and explore the issue of environmental equity among aboriginal residents in Canada's North. In fact, environmental justice is a highly appropriate lens for exploring aboriginal inequality since it is concerned with processes and decisions that discriminate against a disadvantaged group; that is, this perspective seeks to expose processes that limit the rights of people to engage in traditional practices that rely on a clean environment and healthy wildlife (Fletcher, 2003, 167). For instance, the Walpole Island First Nation near Sarnia, Ontario was excluded from an environmental assessment for a large incinerator up-stream from their community because the process guidelines considered their community "outside of the 'community study area' boundary" (Fletcher, 2003, 186). This exclusion occurred even though up-stream discharges into the Saint Clair River had previously impacted the community, forcing them to curtail their hunting and fishing practices and quickly adjust to a new lifestyle (Fletcher, 2003, 164). Furthermore, environmental justice is a highly appropriate perspective because almost all aboriginal groups in Canada are considered disadvantaged and because obvious disproportionate environmental

harms are already borne by aboriginal people (Krakoff, 2002). This body of literature, therefore, provides relevant knowledge for this thesis. Now that its relevance has been established, the following paragraphs aim to describe environmental justice.

The social theorist that is most relevant to environmental justice is German Sociologist Ulrich Beck (Fletcher, 2003). In his influential work *Risk Society*, Beck describes the emerging shift in predominant societal concerns from one of unequal distribution of wealth to one of unequal distribution of risks. He observes:

The driving force in the class society can be summarized in the phrase: *I am hungry!* The movement set in motion by the risk society, on the other hand, is expressed in the statement: *I am afraid!* The *commonality of anxiety* takes the place of the *commonality of need* (1992, 49).

Social dangers are now associated with physical proximity to the source of danger, which often takes the form of environmental risks. The nature of many of these risks has largely been undetectable until recently. Today, it is difficult to avoid hearing scientists and risk assessment experts cautioning the public about the calculated risks associated with eating certain foods or even drinking water (e.g. Taylor, 2004). However, many critics consider Beck's theory as too general, ignoring structural imbalances of power and institutionalized values and interests (Fletcher, 2003). Specifically, Beck does not differentiate between objective processes – those unintended outcomes of widely accepted standards (e.g. risk analysis, cost-benefit analysis) – and institutionalized environmental inequity (Higgins, 1993). The latter of the two processes considers the level of power among disadvantaged populations, the political nature of many processes, and the geographic distribution of people based on race, class, and other social indicators in order to help explain environmentally related inequities. The scope of environmental justice, then, far exceeds the breadth presented by Beck.

Environmental justice researcher Gary Bryner (2002) suggests that, while environmental justice research does not always conform to a distinct classification, there are a number of categories in which this research often falls. He suggests that most research using an environmental justice perspective is concerned with civil rights, distributive inequality, public participation, sustainability, and social justice. For the purposes of exploring Canada's northern EA process, distributive equity and public participation are the most relevant approaches to environmental justice. That is, these approaches are useful to

help understand equity and fairness in EA by measuring the distribution of impacts and benefits across northern aboriginal people and the degree of public participation in the decision-making process. These approaches are described in more detail below.

First, distributive equity seeks to distribute impacts and benefits equally, or at least offset impacts for the least well off. "Compensatory justice" seeks to correct or compensate for an unfair distribution of environmental burdens or lack of benefits. Also called "environmental equity" (Cutter, 1995; Mitchell, 2002), distributive equity and compensatory justice assumes that impacts and benefits can be perfectly distributed. Obviously, this goal is difficult, especially when those impacts and benefits cannot be easily measured. In effect, Bryner argues that quantifiable values (e.g. potential income) are more likely to be redistributed than non-quantifiable values (e.g. value of traditional practices). Moreover, the distributive equity approach requires an answer to "what is fair?" (Mitchell, 2002). An answer to this question is difficult, and might seek diverging stakeholders (e.g. aboriginal groups and multinational corporations) to agree upon project objectives.

Second, the public participation approach to environmental justice seeks to give all impacted community members a voice to participate in a decision-making process. In particular, this approach seeks to give a voice to those members who are powerless and ensure that all participants are given enough social capital to participate in a fair manner. In 1991, The First National People of Color Environmental Leadership Summit (held in Washington, DC) lauded this approach:

The fundamental right to political, economic, cultural, and environmental selfdetermination of all peoples [and] *right to participate as equal partners at every level of decision-making* including needs assessment, planning, implementation, enforcement, and evaluation (In Higgins, 1993, 293, *emphasis added*).

In this sense, procedural equity requires citizen involvement in planning and management through partnerships and co-management regimes that incorporate local knowledge (Mitchell, 2002). However, the answer to "who participates?" is a difficult question that requires answers under this framework. Furthermore, participation is not the panacea for creating justice; indeed, it cannot, by itself, equalize the distribution of impacts and benefits on disadvantaged communities (Suagee, 2002). The goal of environmental justice, however, is not to eliminate environmental risks and satisfy all stakeholders; environmental justice

simply aims to reduce these risks and create a process that stakeholders consider fair and reasonable (Mitchell, 2002).

From this brief review of the environmental justice literature, three important lessons can be learned. First, the *distribution* of risks and benefits significantly burdens disadvantaged populations where compensation may be used to correct this inequity (Cutter, 1995; Fletcher, 2003). Second, a greater degree of *participation* in decision-making among these impacted groups can help to redistribute these impacts and benefits in a more equitable manner (Illsley, 2002). And third, environmental justice does not require that the interests of all stakeholders be satisfied; rather, the process must at least be considered fair and reasonable to all stakeholders (Mitchell, 2002). As outlined in section 2.3 above, however, the EA process has generally neither been fair nor reasonable to northern aboriginal stakeholders. Table 2.1 describes the limitations of EA design and practice that both limit the achievement of Gibson's advanced EA and disproportionately burden northern aboriginal residents.

2.5 Chapter Summary and Conclusions

Developed from a review of the critical EA and environmental justice literatures, this section has highlighted six key limitations that pose barriers to achieving advanced EA for aboriginal people in Canada's North. Many analysts agree that EA practice and design does not adequately address the needs of aboriginal populations (e.g. Edelstein & Kleese, 1995; Higgins, 1993; O'Faircheallaigh, 1999; Tollefson & Wipond, 1998). Scoping tends to avoid social, cultural, and cumulative effects that are most relevant to aboriginal people living in the North. EA methods do not always integrate local knowledge, while the EA process tends to ignore community goals, does not address aboriginal land tenure in decision-making, places less importance on an aboriginal worldview, and is not designed to address economic benefits. The following quotation describes a common sentiment expressed by many scholars reviewed in this section:

Most environmental assessments and most monitoring systems for northern development projects neither involve aboriginal communities significantly nor include northern aboriginal peoples' vast knowledge of the natural environment. As a result, most northern EIAs are ineffective (Sallenave, 1994, 1).

According to the framework outlined in section 2.3, *EA optimists* (e.g. Armour, 1991; Gibson, 2002; Meredith, 1992) would argue that these limitations could be overcome by improving EA, while *EA pessimists* (e.g. Nikiforuk, 1997; Wismer, 1996) would argue that these limitations effectively block EA from achieving an advanced form of environmental assessment and environmental justice for aboriginal people. Aiming to settle the contention between the *EA optimists* and *EA pessimists*, this thesis seeks to evaluate a northern EA process that is considered to be closer to an advanced state by comparing it to normative criteria. The normative criteria are described in Table 2.2 and could be used to evaluate any EA process. These criteria are devised by taking the "inverse" of the six EA limitations detailed in Table 2.1. The normative criteria, then, describe an EA process that would effectively meet advanced EA and the goals of environmental justice for aboriginal stakeholders in natural resource developments. The evaluation process that applies the normative criteria is described in more detail in chapter three.

Couch (2002), a former Senior Policy Analyst at the Canadian Environmental Assessment Agency, outlines one new form of governance that was used outside of the formal EA process for BHP Billiton's Ekati Diamond Mining Project in the NWT. After BHP submitted their EIS, the federal and territorial government required that legally binding Impact and Benefits Agreements be negotiated between the proponent and interested aboriginal groups. An Environmental Agreement and a Socio-Economic Agreement were also negotiated between governments and the proponent. These agreements are not required under any legal conditions that apply to this part of the Northwest Territories (Keeping, 1999-2000). Two other diamond mines (i.e. Diavik Diamond Mines and Snap Lake Diamond Mines) followed the precedent set by the Ekati Diamond Project by negotiating similar agreements.

Couch (2002, 277) claims that all stakeholders in the BHP planning process, "reached an agreement and there has been no contention that the agreement was basically unfair". Although his findings are not universally agreed upon (e.g. Bielawski, 2002; O'Reilly, 1997), Couch's favourable analysis prefers this so-called "two-step" process in resolving a number of conflicts arising from "the legacy of past Canadian Aboriginal policy" (2002, 266). At the same time, however, "substantial agreements made outside the EA process raise questions about the purpose and integrity of public review processes" (Mulvihill & Baker, 2001, 364;

Table 2.2:Normative Criteria used to evaluate the Mackenzie Valley Environmental Impact
Review EA Process.
These were devised by taking the inverse of the limitations that were identified in a
review of the critical EA and environmental justice literatures. These limitations are
presented in Table 2.1.

EA Limitations	Normative Criteria (The EA process should)		
Narrow and Inflexible Scoping	Be Broad and Flexible	 Prepare for uncertainty Focus on relevant impacts, including cumulative impacts 	
Exclusionary Methods	Be Inclusive	 Transparent, open, and integrates public concerns Interdisciplinary, multi-method, substantial use of TK and local knowledge 	
Process over Product	Emphasize Product as well as Process	 Focus on values, ethics, community concerns Treated as tool to achieve clear aims 	
Discretionary Decisions	Emphasize Meaningful Decisions	 Have fair and balanced decision-making Substantially inform project outcomes Be driven by project type or environment 	
Token and Restrictive Consultation	Emphasize Partnership	 Weigh local/aboriginal values at par with dominant values Give participants equal consideration Allow for local decision-making to influence outcomes 	
Excludes Benefits	Include Benefits	 Assess benefits Aim decisions at maximizing benefits as well as minimizing impacts 	

Nikiforuk, 1997). Indeed, the presence of these agreements may indicate that a fundamental deficiency exists within the EA process. In particular, the EA process might not adequately treat each stakeholder in a fair and equitable manner. If these agreements do stem from a fundamental deficiency of EA, the *EA pessimists* should consider this approach as a fundamentally new framework that aims to achieve the goals of advanced EA.

The findings from this evaluation will be used to explore the rationale behind the second part of the two-step process (i.e. supraregulatory agreements) – the second of two main objectives of this thesis. The next chapter will begin to explore this rationale by describing supraregulatory agreements.

3 AN INTRODUCTION TO *SUPRA*REGULATORY AGREEMENTS, THE MACKENZIE VALLEY, AND THE RESEARCH PROCESS

3.1 Introduction

Chapter two concludes that environmental assessment (EA) has considerable flaws in its design and practice. Questioning EA effectiveness further, Couch (2002) favourably analyses a two-step process that was applied in the Mackenzie Valley, Northwest Territories (NWT). He suggests that EA followed by a second step comprised of supraregulatory agreements might prove to be a preferred alternative to EA alone. To provide background to this novel approach and to set up the analysis that follows, this chapter describes: (1) supraregulatory agreements as they have been conceived of and used; (2) a novel example of their use in the Mackenzie Valley, Northwest Territories (NWT); and (3) the field work logistics that were undertaken to infer and interrogate the rationale for these agreements as they function in the Mackenzie Valley.

3.2 *Supra*regulatory Agreements

For the purpose of this thesis, supraregulatory agreements are defined as legally binding, project-specific agreements that are not described in existing legislation. Typically, they are used in tandem with EA and are negotiated between a company that is planning a resource development and a stakeholder group that is considered to be impacted by this proposed development. While this typically is a local community, governments may also be signatories to these agreements. This section aims to distinguish the various types of supraregulatory agreements, outline their origin and application, and describe their rationale as it has been conceived by a small number of analysts.

In common usage, there are three types of supraregulatory agreements: Socio-Economic Agreements; Impact and Benefits Agreements (IBAs); and Environmental Agreements. While all three types of supraregulatory agreements have often been referred to as simply "Impact and Benefits Agreements" in the limited literature that concerns them (e.g.

Kennett, 1999a; Wilkinson, 2003), the purpose of the three forms of supraregulatory agreements are quite distinct.

One of the earliest documented supraregulatory agreements is the "Nanisivik Agreement", which was signed in June of 1974 between the Government of Canada and Mineral Resources International Ltd (Kennett, 1999a). Other agreements have been negotiated without government signatories. For instance, in a review of a social impact assessment conducted for a 1978 oil sands project, Justus & Simonetta (1982) recommended a "Company-Band Agreement" between the Cold Lake Indian Band and Esso Resources Canada, although the subsequent agreement is not documented. Another early bandcompany agreement is documented in a report by the Sub-committee of the Intergovernmental Working Group on the Mineral Industry that was signed between Dogrib Treaty 11 Council and Neptune Resources Corporation in 1989, when no guiding land claim agreement was in place (Kennett, 1999a; SIWGMI, 1994). While no comprehensive list of benefits agreements signed in Canada is available, Kennett's *A Guide to Impact and Benefits Agreements* (1999a) and an MA thesis entitled *Impact and benefits agreements: do the Ross River Dena benefit from mineral projects*? by Doris Dreyer (2004) provide preliminary lists.

Benefits agreements may include provisions for employment, training, business opportunities, support for community programs, cash payments, and support to protect existing social and environmental capital. A number of comprehensive land claim agreements settled in Canada describe the content that is expected in these agreements (e.g. Sahtu Dene and Métis Comprehensive Land Claim Settlement Act, 1994, s.27). The recently implemented Tlicho Land Claims and Self-Government Act (2004) does not identify substantive provisions for IBAs, but defines vague boundaries so a broad set of issues may be included in these agreements (2004, s. 23.4). In many early benefits agreements, a substantial section was devoted to provisions for environmental protection and mitigation. For instance, the Cominco Alaska/NANA Agreement executed in 1982 between the Northwest Alaska Native Association and Cominco Ltd established an advisory committee to review environmental monitoring reports submitted to the government, monitor various environmental components, and conduct environmental audits (Wilkinson, 2003). However, most of the content in these agreements is devoted to socio-economic measures and a number of more recent benefits agreements do not include environmental measures at all. Instead, Environmental Agreements, a separate legal instrument devoted to environmental mitigation

and follow-up, have been used in unsettled claim areas in the NWT. Since these agreements are distinct from other benefits agreements in this region, Environmental Agreements are discussed later in this section.

To be exact, benefits agreements can be both regulatory and supraregulatory; that is, they can be legally required under certain conditions; however, they are often struck voluntarily (Keeping, 1999-2000). Legally required agreements include, for example: "Benefits Plans", which are required under section 5.2 of the *Canada Oil and Gas Operations Act* for oil and gas developments (R.S.C. 1985, s. 5.2(1)); and various named agreements (e.g. "Inuit Impact and Benefits Agreements", "Cooperation Agreements", "Agreement", etc.), which are required under some aboriginal land claim settlements. Voluntary benefits agreements can include: Socio-Economic Agreements, which are not required under legislation and are typically negotiated between a developer and a government authority responsible for social impacts (e.g. the Government of the NWT); and, Impact and Benefits Agreements (IBAs), which are not required under legislation and are typically negotiated between an impacted aboriginal group and a mining company.

The identified rationales for these latter truly supraregulatory benefits agreements vary among the small number of authors who discuss them (e.g. Keeping, 1997; Kennett, 1999b; O'Reilly & Eacott, 1999-2000; Smillie, 2002; Sosa & Keenan, 2001). Most of these authors claim that the diversity in rationale is a function of the diversity among signatories; that is, given that each supraregulatory benefits agreement is negotiated among diverse groups that are influenced by distinct economic and legal situations, it is difficult to neatly describe the single rationale of supraregulatory benefits agreements (Sosa & Keenan, 2001). Given this complexity, this research aims to review the rationale for these agreements from the perspective of aboriginal groups and the federal and territorial governments only.

Steven Kennett, research analyst with Canadian Institute of Resource Law (CIRL) and expert on supraregulatory benefits agreements, argues that these agreements have two primary purposes from the perspective of government and aboriginal parties (1999a, 1):

- to address concerns of aboriginal people and other residents regarding adverse effects (i.e. community, culture, environment, land-based economic activities) associated with large-scale mineral development; and
- to ensure local people and communities have an opportunity to obtain benefits from mineral development occurring in their region.

These purposes are reflective of particular socio-economic and legal contexts. The socio-economic context is one of marginalization, especially in the NWT (Kennett, 1999a). Starting with Watkins (1977), it has long been argued that northern Canada has experienced "underdevelopment" or the blocking of development, owing to the tendency for resource rents to "leak" southward. This so-called "blockage" corresponds to a lack of regional economic and political sovereignty. In the case of the NWT, the blockage historically stems from top-down, manipulative policies, and economic dependence. Since the NWT is a staples-dependent region where regional benefits flow to Canada's heartland, it continues to be in the interest of the heartland to control external and internal variables (e.g. consumer demand, investment, availability of trained workers, etc.) to maximize their potential benefits (Barnes, 1996; Bone, 2003). From this perspective, developments, including large-scale mining, tend to exacerbate the existing socio-economic problems. While some optimistic analysts argue that long-term benefits can accrue if linkages and diversification occur (e.g. Barnes, 1996), Watkins (1977, 91) argues that encouraging aboriginal northerners to accrue these linkages and achieve diversification is akin to "asking the condemned man to take up rope manufacturing". Since many aboriginal people continue to exist in a mixed economy – one of subsistent hunting and fishing and one of earning wages - the act of broadening the non-renewable resource industry results in encroachment on the renewable resource economy. Watkins (1977) argues that by removing the blockage, the NWT can develop in a way that achieves lasting benefits while maintaining the integrity of a traditional renewable resource economy. At present, land claim negotiations, self-government, and territorial devolution are beginning to break down this blockage by redirecting the flow of resource revenues and other benefits to the aboriginal and non-aboriginal residents of the NWT.

Given this socio-economic context, Kennett (1999a) claims that aboriginal people and governments sign benefits agreements in order to improve their situations within this context by capturing potential benefits associated with large resource developments (1999a), such as:

- increased direct employment opportunities and levels of income;
- increased opportunity to gain work experience and skills;
- indirect economic effects from greater disposable income;
- improved community infrastructure and social programs through cash payments;
- business development opportunities for aboriginal contractors or other businesses; and,

• opportunities for aboriginal people to make use of resource development infrastructure (e.g. airstrips and medical facilities).

The authors of the *Independent Review of the BHP Diamond Mine Process* report (CIRL, 1997) agree, stating that aboriginal people and government recognize this socioeconomic context and, in particular, the context in which mining has the potential to exacerbate these problems (CEAA, 1996; Klein et al., 2004). Signing IBAs, according to the authors of the CIRL report, "ensures that benefits flow directly to the Aboriginal communities affected by a project" (CIRL, 1997, 27).

Kennet and other analysts consider that benefits agreements also function to address gaps or weaknesses in the existing legal and regulatory framework for mineral developments (e.g. Illsley, 2002; Keeping, 1999; Sosa & Keenan, 2001). As noted above, oil and gas developers are obliged to carry out benefits plans under the Canada Oil and Gas Operations Act (R.S.C. 1985, s. 5.2). Mining projects, on the other hand, do not have such requirements outside of settled land claim areas. In effect, benefits agreements basically function as benefits plans for mining projects (Keeping, 1999). Similarly, these voluntary benefits agreements have been considered akin to the legally required benefits agreements described in many existing aboriginal land claim agreements. By identifying a gap in benefits sharing legislation, this rationale for supraregulatory agreements recognizes the vague, but substantial, rights of traditional landowners and land users in Canada. The authors of the report by CIRL agree: "IBAs simply reflect the right of Aboriginal groups to receive direct benefits from projects occurring within their traditional territories" (CIRL, 1997, 27). Since the responsibility to fulfil these rights rests with the federal government, it is unclear whether this might be an explicit rationale for IBAs since they are privately negotiated between a company and an impacted aboriginal group. However, Janet Keeping (1999-2000, 61), a research associate with the CIRL, argues that the rationale for IBAs where no legal requirement exists among aboriginal people might, more closely, stem from "the federal government's fiduciary duty to protect their interests" with respect to land title⁵. More generally, Kennett (1999a, 1) sees that the rationale for IBAs simply stems from the "underlying premise that it is no longer acceptable to develop natural resources in a manner that imposes significant costs at the local level while the benefits are enjoyed elsewhere".

⁵ See Keeping (1999, 67) for full description of fiduciary obligation.

Offering a slightly different view, Ciaran O'Faircheallaigh, an expert social impact assessment practitioner and analyst from Griffith University, highlights a design flaw in the resource planning process that gives rise to IBAs. He argues that IBAs respond to the inadequate flow of EA recommendations to the decision-making process that should bring about a more "favourable balance of benefits and costs" for aboriginal people (1999). Klein, Donihee, and Stewart (2003, 4), independent consultants who have experience in the NWT, agree with this rationale and claim that IBAs are used as "mitigation or compensation for potential social and economic impacts" stemming from resource developments. As an alternative to formal regulatory instruments like water licences and land leases, the authors claim that IBAs are a "preferred tool for addressing the concerns of aboriginal people" (4).

Of course, given the voluntary nature of these agreements, those concerns will not always be addressed. O'Faircheallaigh (1999) notes that when an aboriginal party does not have adequate capacity to negotiate, little can be done. The absence of a land claim settlement can add to this capacity strain. There are no requirements outlining provisions for benefits agreements when a claim is not settled, which can restrict aboriginal groups from pursuing their interests in negotiations. In a letter to the Minister of the Environment, the National Coordinator for Mining Watch Canada, Joan Kuyek, agrees:

Where the community has not settled their land claim, they have few institutional resources with which to bargain with the company over an [IBA]. There is no level playing field... And sometimes the provisions of the IBA compromise the governance powers of the community (1999).

In addition to the problem of restricted capacity, it remains unclear how benefits agreements' provisions can be enforced (Keeping, 1999-2000; Kennett, 1999a; Wismer, 1996) and whether these agreements complement or conflict with the EA process (Klein et al., 2004). It is also unclear whether IBAs should be a condition of project approval (Kennett, 1999b). In the case of Voisey's Bay Mine in Labrador, the EA panel recommended that both signing IBAs and settling land claims be a condition of project approval (Michael et al., 1999). Other analysts are even more sceptical and see IBAs and Socio-Economic Agreements as superficial arrangements for entrenched problems concerning resource planning and participation. These agreements have been considered a "piecemeal approach" to sustainable development (Keeping, 1999-2000; O'Reilly & Eacott, 1999-2000). They have also been viewed as another example of the "irrational" Canadian resource planning system,

given that both parties do not know what to expect or, likewise, how to plan for negotiations (Nikiforuk, 1997).

The context from which environmental agreements stem is similar to that of benefits agreements, but their aims appear to be less similar. Benefits agreements seldom include environmental provisions, while environmental agreements do not directly address benefits issues. According to Kennett (2001), environmental agreements aim to:

- implement EA recommendations not captured in the regulatory process;
- fill in the gaps in the regulatory regime;
- monitor proponent compliance with regulatory requirements;
- establish mechanisms to inform aboriginal communities and make their concerns heard;
- provide a forum for all stakeholders for the life of the project; and,
- establish comprehensive management, monitoring, and reporting requirements for the life of the project (including security deposits).

In short, environmental agreements aim to create a follow-up process that allows for greater communication and participation among stakeholders (i.e. aims 4 and 5) and integrate EA decision-making throughout the life of a project, which includes follow-up and monitoring (i.e. aim 1, 2, 3, and 6).

Environmental Agreements, Socio-Economic Agreements, and IBAs have similar origins but different intents. In many situations, these agreements are separated to exclusively deal with either benefits (i.e. IBAs and Socio-Economic Agreements) or the environment (i.e. Environmental Agreements). While these rationales appear to be distinct, there is one important feature shared among all of these agreements: both benefits agreements according to O'Faircheallaigh and environmental agreements according to Kennett appear to address deficiencies in EA and, in particular, the deficiency of follow-up in EA. In other words, supraregulatory agreements appear to address the inadequate flow of EA recommendations, and goals (i.e. offsetting adverse impacts for positive ones), into follow-up measures. While this argument supports the hypothesis proposed in chapter one, it is only based upon the opinion of a small number of authors. Out of these authors, only a few have explicitly reviewed the relationship between EA and supraregulatory agreements in Canada (e.g. Klein et al., 2004; O'Reilly & Eacott, 1999-2000), none of whom have conducted empirical research on the subject. Indeed, it has been noted by these authors that this relationship is unclear and requires further investigation. The following two sections describe this researcher's completion of such an investigation, in the context of the Mackenzie Valley region of the NWT.

3.3 *Supra*regulatory Agreements in the Mackenzie Valley Region of the NWT

In his highly critical review of EA in Car ada, Boyd (2003, 158) considers EA models based on special arrangements, like land claims, to have "the potential to result in improved EA" (Boyd, 2003, 158). One such process resides in the Mackenzie Valley region of the NWT. Illustrated in Figure 3.1, the Mackenzie Valley makes up most of the NWT with the exception of the Inuvialuit Settlement Region, which is located at the mouth of the Mackenzie River. The Mackenzie Valley region is made up of five sub-regions, three of which have settled comprehensive land claims (i.e. Gwich'in, Sahtu, and Tlicho regions). Established out of the Gwich'in and Sahtu Dene and Métis Comprehensive Land Claim settlements (e.g. *Gwich'in Land Claim Agreement*, 1993, chapter 24; *Sahtu Dene and Métis*

Figure 3.1: Map of the Mackenzie Valley Region of the NWT. Five main regions define aboriginal claim areas. The legend below details the three diamond mine projects (Adapted from NRCan, 1997). Appendix H details the required copyright permissions.



Comprehensive Land Claim Agreement, 1993, chapter 25) and defined under the *Mackenzie Valley Resource Management Act* (MVRMA)⁶, the region's EA process is administered by the Mackenzie Valley Environmental Impact Review Board (MVEIRB or "the Board"). As a co-managed decision-making board made up of half aboriginal and half federal government representatives, the regime and its EA process have been viewed as a best-case example (Armitage, 2004; Donihee et al., 2000).⁷

In addition to housing this unique process, the Akaitcho and Tlicho regions of the Mackenzie Valley house three diamond-mining operations. The first diamond mine in North America, BHP Billiton's Ekati Diamond Mine, was approved in 1997, and was followed by the Diavik Diamond Mine owned by Rio Tinto plc and Aber Diamonds Corporation. A third mine, De Beers Canada's Snap Lake project, is set to open soon (see Figure 3.1). While all three projects fall under the jurisdiction of the MVRMA, only the most recent mine, the Snap Lake Diamond Mine, was assessed using the MVEIRB EA process. Of most significance, a Socio-Economic Agreement and an Environmental Agreement were negotiated and signed for each mining operation. The mine developers also negotiated IBAs with six aboriginal groups in the case of Ekati Diamond Mine, and with five aboriginal groups in the case of Diavik and Snap Lake Diamond Mines. Appendix A details the timelines and Appendix B lists the parties to each of these supraregulatory agreements. It has been said that BHP Billiton set the precedent, although reluctantly, for negotiating IBAs in the Mackenzie Valley (e.g. Smillie, 2002). The company initiated discussions with the Dogribs of Treaty 11 in May of 1994. In August 1996, BHP Billiton was informally asked to make "significant progress" in IBA negotiations by the then Minister of Indian and Northern Affairs Canada, Ron Irwin. A few days later, the Minister amended his request to include the Socio-Economic Agreement under negotiation between the company and the Government of the NWT (CIRL, 1997). While all parties eventually reached an agreement with BHP Billiton, the exact rationale of Minister Irwin and the federal government, the Government of the NWT, and aboriginal groups for signing supraregulatory agreements and continuing to use these agreements remains unclear.

⁶ The MVRMA (1998) is a central piece of legislation guiding the MVEIRB. However, the *Gwich'in Land Claim Settlement Act* and the *Sahtu Dene and Métis Land Claim Settlement Act* take precedence over the MVRMA if conflict exists between them.

⁷ See Donihee et al. (2000), *EIA Guidelines* (MVEIRB, 2004a), and Haefele & Cliffe-Phillips (2004) for a more detailed description of the MVEIRB EA process.

3.4 Research Logistics

As outlined in chapter one, three tasks were completed to assess the rationale for supraregulatory agreements. The first task required a literature review, the details of which make up chapter two. The last two tasks required the researcher to infer and directly assess rationales for supraregulatory agreements from the case study site. This section documents logistics of the research process, as undertaken in Yellowknife, NWT, in the summer of 2004.

Information on the MVEIRB EA process and the MVRMA regime was primarily collected through document review. This review required an in-depth review of a number of archives in Yellowknife, including those housed in the MVEIRB office, the Department of Indian and Northern Affairs offices, the Independent Environmental Monitoring Agency, and the libraries of the Resources Wildlife and Economic Development division of the Government of the NWT and Terriplan Consultants. When relevant information was found in these documents, summaries and quotations were entered into a digital document and referenced with an index number or document title. These summaries were then reviewed by the researcher for concepts and entered into a table according to their relevance to the normative criterion developed in chapter two. Appendix C includes excerpts from some of these summary and analysis documents. Once this table was complete, gaps in knowledge and evidence were identified (e.g. the degree to which EA goals follow through after an EA ends). At this time, the degree to which the process met the normative criteria was assessed and particular areas where the process did not meet the criteria were noted. These gaps and noted deficiencies helped to formulate the interview schedule used to complete task three.

Throughout the document review process and the beginning of the interview process, a number of conversations and observations with key informants took place. A list of informants who contributed is included in Appendix D. Many conversations were based on the knowledge sought in an interview and often lasted for one hour or more. Most key informants who participated in conversations also participated in an in-depth interview. Insights from these encounters were written down and described in a document. A wide variety of individuals informed the data that were collected, ranging from lawyers and consultants to civil servants and members of First Nations and Métis organizations. These conversations also helped to formulate the interview schedule used to

complete task three. These informal meetings were also highly useful for generating contacts in a purposive snowball sample of key informants for interviews.

Interviews were used for two purposes: to supplement the document analysis undertaken for the EA process review; and to directly assess the rationale for using supraregulatory agreements among aboriginal and government signatories. In other words, interviews were first used to complete the program evaluation and then used to directly assess the rationale for these agreements among informants. The program evaluation helped to inform the interview schedule for both tasks two and three and, in particular, the follow-up questions to prompt respondents to narrow their responses down or recall anything at all. Many respondents were unique in that their area of experience was such that interview schedules needed to be modified to reflect a particular informant. To avoid changing the schedule for each informant, there were four main schedules used, where one schedule was devoted to each of EA, IBAs, Socio-Economic Agreements, and Environmental Agreements. A particular schedule or combination of schedules was used based on the informant's experience. For each interview schedule, follow-up questions were used when needed. The interview schedules and follow-up questions are included in Appendix E.

Interviews were conducted in-person at an agreed-upon venue, usually at the respondent's desk or in a public space, using a tape recorder and a note pad. Transcripts and notes were entered into digital documents and randomly numbered to protect the respondent's identities. Participant confidentiality was ensured by the interviewer through a written agreement (used as the respondent saw fit) and formal ethics approval issued by Simon Fraser University and the Aurora Research Institute, the former of which is attached in Appendix F. Transcripts were reviewed for concepts and then entered into a table as they related to chapter two's normative evaluative criteria. The original transcripts were indexed by linking them to the concepts in the table. A table that integrates the knowledge found in task two and three was then devised. This final table was used to create Table 4.1 in chapter four. From Table 4.1, four key deficiencies were identified (i.e. inadequate follow-up, capacity and trust, and lack of benefits). These deficiencies were then used to devise Table 5.1 in chapter five, which identifies those EA deficiencies as a rationale for particular characteristics in each type of supraregulatory agreement.

3.5 Chapter Summary

Having reviewed the rationales for supraregulatory agreements as they have been conceived of by a small number of authors, it is apparent that a number of rationales agree with the research hypothesis proposed in chapter one. Kennett (1999a) and others claim that IBAs catch mining benefits and maximize these benefits for the impacted aboriginal groups, and address legal gaps and weaknesses in the environmental planning process. Kennett (1999a) and O'Faircheallaigh (1999) further claim that supraregulatory benefits agreements and environmental agreements aim to improve the flow of EA recommendations to project outcomes, respectively. As such, these authors support the hypothesis that supraregulatory agreements function as a result of EA deficiencies. However, the evidence that supports this contention is minimal. In fact, authors have highlighted that the relationship between EA and supraregulatory agreements remains unclear.

This research aims to clarify the rationale for supraregulatory agreements as they address deficiencies in EA. Based on a case in the Mackenzie Valley, this research seeks to understand the rationale for IBAs, Socio-Economic Agreements, and Environmental Agreements as they were used in the Tlicho and Akaitcho regions of the Mackenzie Valley, NWT, for three diamond mine developments. This region is critical to EA given that the MVEIRB EA process is considered to be an improvement upon other processes in Canada and, yet, three sets of supraregulatory agreements have been used in this jurisdiction.

Multiple approaches were employed to collect data from this case. A program evaluation of the MVEIRB EA process was undertaken using document review, observations, and interviews to infer a rationale for supraregulatory agreements. Once this task was complete, a direct assessment of the rationale for these agreements was undertaken by interviewing a purposive sample of key informants. The next two chapters summarize the findings generated from these two tasks.

4 INFERRING RATIONALE: AN EVALUATION OF THE MACKENZIE VALLEY ENVIRONMENTAL IMPACT REVIEW BOARD ENVIRONMENTAL ASSESSMENT PROCESS

4.1 Introduction

The Mackenzie Valley Environmental Review Board (MVEIRB or "the Board") and other co-managed environmental assessment (EA) processes established under land claims in Canada's North have been considered by many to be an improvement upon other, more conventional, processes in Canada (e.g. Armitage, 2004; Boyd, 2003; Donihee et al., 2000; Lawrence, 2003). In fact, these processes are likely to meet EA "best practices" as they are detailed in the EA critical literature (e.g. Gibson, 2002; Sadler, 1996). This chapter tests this perspective by evaluating the environmental assessment (EA) process used in the Mackenzie Valley, which is designed by the *Mackenzie Valley Resource Management Act* (MVRMA) and practiced by the MVEIRB and intervening parties. The evaluation highlights strengths and weaknesses of the MVEIRB EA process by applying normative criteria, as they were devised in chapter two.

The evaluation presented in this chapter and summarized in Table 4.1 finds that the design and practice of the MVEIRB EA process is well beyond "average", reflecting a movement towards what Gibson has identified as "advanced EA" (2002). However, the Board does not achieve this without some problems. Sections 4.5, 4.6, and 4.7 highlight some key deficiencies of the MVEIRB EA process, some of which largely stem from areas beyond the influence of the Board. These findings call into question the role of EA, and direct attention to the potential for supraregulatory agreements to minimize these imperfections.

Table 4.1:MVEIRB EA Program Evaluation Findings.
It is apparent that the MVEIRB EA process meets most of the normative criteria. It is
not apparent that the MVEIRB EA process adequately meets the normative criteria in
four ways (i.e. inadequate follow-up; lack of trust among participants; unequal
capacity; and, unequal flow of benefits) in either practice (i.e. informal actions) or
design (i.e. legislative requirements).

Normative Criteria The EA process should	X = N ✓ : Design:	Score Not Apparent = Apparent <i>Practice:</i>	Score Explanation
Be broad and flexible	√ √	✓ ✓	 Recognizes uncertainty, promotes learning Considers social, cultural, economic impacts and benefits, aims to manage cumulative impacts
Be inclusive	✓ X	√ √	 Considered a "bottom-up approach" Draws on wide range of parties, open to participation. TK valued at par in practice only
Emphasize product as well as process	√ √	✓ X	 Recommendations directed to many authorities, suited to CEA and local needs Tool to achieve regional and long-term goals. Considered too process-based
Emphasize meaningful decisions	✓ X ✓	✓ X ✓	 Board bound by rules of natural justice Inadequate follow-up Driven by local environment (i.e. public concerns) in meaningful way
Emphasize partnership	✓ X ✓	✓ X ✓	 Half of Members are aboriginal, all Members from the North Unequal capacity, lack of trust among participants Locals inform Board decisions
Include benefits	✓ X	✓ X	 Assesses benefits Does not make recommendations to maximize benefits in design (makes benefits-related recommendations occasionally in practice)

4.2 Broad and Flexible

Often considered the most critical stage in EA, scoping sets the terms under which an assessment takes place. This stage has often been criticized for narrowing issues in a manner that excludes relevant aims like sustainability from the EA terms of reference (Mulvihill & Baker, 2001). Under the MVRMA, the MVEIRB is required to consider a broad range of issues that reflect the interests and needs of the local participants. Further to covering a wide breadth of issues, the MVEIRB also considers substantial depth within each relevant issue. While residual uncertainty inevitably lingers at the end of any assessment, the MVEIRB

uncovers detail in an attempt to reduce uncertainty during the assessment, while also addressing uncertainty in their recommendations to the Minister.

Under the MVRMA, an "impact on the environment" is not limited to effects on biophysical components, but also includes effects on social, cultural, and economic components (S.C. 1998, s.111). This breadth allows for a more complete picture of the project environment than other processes in Canada. For example, the Canadian Environmental Assessment Act (CEAA) only requires an assessment of potential indirect social impacts that arise through identified potential biophysical impacts (S.C. 1992). Along with this broad definition of environment, the MVRMA requires that the MVEIRB assess the impacts (i.e. adverse and positive) of the proposed development (S.C. 1998, s.117). By assessing a project based on net change (i.e. adverse minus positive), as opposed to net impact (i.e. adverse impact only), the Board is required to consider a more dynamic project environment. This breadth, as one Board representative states, allows the goal of sustainability to be realized through "sustainable economic, social, and cultural development"⁸, even for inherently unsustainable non-renewable resource developments like mining. However, the inclusion of economic benefits is criticized for adding to the momentum that already supports the project. One government representative describes this criticism: "you see your impacts being reduced by virtue of higher benefits". According to the MVRMA, then, a net biophysical impact can turn into a net benefit.

The inclusion of social, cultural, and economic issues, however, seems to give the EA process relevance to local participants. For instance, the MVEIRB terms of reference for the proposed Snap Lake Diamond Project required De Beers Canada Mining Inc. to include the availability and use of skilled workers in the Northwest Territories (NWT), opportunities for local business, barriers to employment, opportunities to diversify, and impacts on subsistence economy (MVEIRB, 2003a). These issues have presumably been of concern to the residents in the Mackenzie Valley long before they were expressed in the first NWT Diamonds Project report of EA (CEAA, 1996).

The wide breadth of issues considered in a MVEIRB EA is apparent; however, the Board has been criticized for placing vague and weak stipulations on the depth of data that should be included in an EA (e.g. MVEIRB, 2003a, 11-13). This has led to confusion later

⁸ The respondents are not identified by name in this chapter, but are described by the group they represent. The name and job title of each key informant are described in Appendix B.

on in the EA process. For example, for the proposed Snap Lake Diamond Project, the proponent argued that the data submitted to the MVEIRB were complete, and that more detailed data should be deferred to the regulatory hearings for the water licence. However, regulatory authorities and other intervening parties felt that this information was necessary in the EA stage and should be submitted during the technical sessions (More, 2003). In this example, the MVEIRB addressed this problem by requiring more depth when uncertainty was apparent in a prediction. That is, when the Board decides that there is not sufficient detail to reasonably predict a potential impact then they require further information before the Board can make a decision. Likewise, the Board introduces an "adaptive management mechanism", according to one Board respondent, such as requesting that proponents submit a post-EA report. This mechanism allows the Board to assess the accuracy of earlier predictions and the effectiveness of the EA recommendations are taken, however, is a difficult task as the MVEIRB has little power to intervene after it makes a decision. This type of post-EA follow-up is an area that will be discussed in more detail in section 4.5.

4.3 Inclusive Methods

EA is often criticized for its reliance on experts (and the exclusion of non-experts) and for being administered by decision makers from a centralized location. These actions tend to remove assessments from both local forms of knowledge and local values (Freudenburg, 1986; O'Faircheallaigh, 1999; Sallenave, 1994). The MVEIRB approach to EA avoids this criticism and is characterized by its inclusive and balanced nature. The process encourages local participation and considers local forms of knowledge in a fair manner.

The MVEIRB EA uses what one Board Member calls a "bottom-up approach" whereby the Board makes use of "every day folks" steeped in local knowledge and values. In the MVRMA, the Board must be made up of an equal number of members from government and aboriginal organizations. Each Board Member must first be nominated by an aboriginal organization or the territorial Minister and then appointed by the Minister of Indian and Northern Affairs Canada (INAC) (*Mackenzie Valley Resource Management Act*, S.C. 1998, s.112). Board Members consider themselves local to the region, allowing for a

substantial amount of local values to influence the assessment. One Board Member described the local character of the MVEIRB membership as highly advantageous:

The Board Members are not INAC bureaucrats or lawyers, or what have you, they come from a variety of backgrounds and their capacities vary. That in itself allows for differing viewpoints and a representation of the Mackenzie Valley.

The Board is also dependent upon the participation of members of the general public to complete an EA. One of the MVRMA purposes explicitly states the importance of public involvement:

The purpose of the establishment of boards by this Act is to enable residents of the Mackenzie Valley to participate in the management of its resource (S.C. 1998, s. 9.1).

Furthermore, the MVEIRB is wholly dependent on external organizations, including the general public, for accumulating the evidence that is necessary to make a complete assessment (e.g. MBEIRB, 2004a, 24). Therefore, local parties working from outside of the Board are given a significant amount of influence over the EA process. These parties often consist of local interest groups, members of the public, aboriginal organizations, and government agencies. The MVEIRB EA process further encourages the general public to influence the process by promoting traditional or local forms of knowledge. While not required under the MVRMA or the preceding land claim agreements, the MVEIRB Guidelines and Rules of Procedure encourage substantial use of traditional knowledge (TK) (e.g. MVEIRB, 2004a; 2001; MVEIRB, 2003b). In practice, traditional knowledge and scientific knowledge are often given equal weight – a consideration rarely given in other processes. For example, the federal CEAA process merely acknowledges the possibility of using TK: "Community knowledge and aboriginal traditional knowledge may be considered in conducting an environmental assessment" (Canadian Environmental Assessment Act, S.C. 1992). In practice, however, more resources from the proponent and intervening parties used in the MVEIRB EA process are allocated to experts of science and law, which inevitably impedes the collection and integration of TK. This is a common frustration among many aboriginal organizations (e.g. CBC, 2004c). One respondent from a local aboriginal organization describes this dilemma:

I think where the MVRMA works really well is that TK and scientific knowledge are given equal weight. It's unfortunate they don't spend the money on doing TK research as they spend on hiring experts on vegetation and geo-technical studies. You can say there's equal weight, but what you are putting your money behind is the one you are putting your weight on.

Even so, the MVEIRB EA process does move beyond its expert-oriented tradition by its comanaged nature, facilitating public participation, and giving traditional knowledge more weight in the assessment.

4.4 **Product as well as Process**

EA is often attacked for being just another disjointed bureaucratic process, where certain stages must be completed in order to attain government funding and authorizations (Lawrence, 2003; Nikiforuk, 1996). The MVEIRB EA process, on the other hand, looks more broadly at long-term and regional goals (e.g. managing cumulative effects). It is also a tool that integrates these goals across organizations that manage resource developments.

As stated in the MVRMA (S.C. 1998, s.114), the intended purposes of the EA process are "to ensure that the impact on the environment of proposed developments receives careful consideration before actions are taken in connection with them" and "to ensure that the concerns of aboriginal people and the general public are taken into account in that process". These are the general goals of most EA processes and play a minor role to the more explicit guiding principles. The guiding principles of the MVRMA require that the EA process aim toward: "the protection of the environment from the significant adverse impacts of proposed developments" and "the protection of the social, cultural and economic wellbeing of residents and communities in the Mackenzie Valley" (S.C. 1998, s.115). In order to successfully achieve these aims, the MVEIRB must consider the long-term and regional impacts of their decisions. Regional and long-term issues typically require the integration of knowledge and resources from multiple parties and organizations. Pursuant to section 128 of the MVRMA (S.C. 1998), the Board facilitates these requirements by directing recommendations to a number of responsible organizations, including proponents, government agencies (e.g. Department of Fisheries and Oceans, INAC, GNWT, etc.), and comanaged boards (e.g. Mackenzie Valley Land and Water Board, Sahtu Land Use Planning Board, etc.). This allows the Board to consider the dynamic and often fragmented governing structures that influence project outcomes and recommend broad solutions. This, in turn,

makes the MVEIRB particularly well suited to assess cumulative effects – without even considering the degree to which the Board is designed to explicitly assess these effects (S.C. 1998, s.117). Indeed, cumulative effects assessment (CEA) often requires knowledge sharing, time, finances, and a certain amount of persuasion to act in a way that has long-term benefits (Mitchell, 2002). The MVEIRB is in a unique position to coordinate the environmental planning and management process, they can expose the gaps that exist and, at the same time, delegate jobs to parties that are suitable to fill these gaps.

As mentioned above, one example of long-term and regional goals that the MVEIRB aims to achieve is addressing cumulative effects. In one assessment, the MVEIRB decided to conduct a CEA for four diamond exploration projects in tandem. Three out of four projects were similar in scale and all four projects were proposed for the Wool and Drybones Bay area southeast of Yellowknife. The CEA integrated all four projects in one study and used "reasonably foreseeable future development" as a study scope. The latter action is a common practice for the MVEIRB (Ehrlich & Sian, 2004) and both actions are considered a "best practice" in the EA literature (e.g. Dubé, 2003; Tollefson & Wipond, 1998). The CEA also fulfilled its guiding principle to protect the cultural well being of residents and communities in the Mackenzie Valley. The report on the EA stated that the proposed development by New Shoshoni Ventures should be rejected because it "will contribute significantly to the cumulative effects on both the tangible and intangible aspects of culture that are central to the social and cultural well being of the [Yellowknives Dene First Nation]" (MVEIRB, 2004b, 61).

The MVEIRB EA approach to addressing long-term and regional goals, like managing cumulative effects, accommodates the unique needs of local residents in the Mackenzie Valley. Since northern aboriginal populations are more vulnerable to cumulative impacts (Bone, 2003; Tollefson & Wipond, 1998), the MVEIRB's focus on managing cumulative impacts is particularly relevant to about half of the residents in the Mackenzie Valley.

While it appears to facilitate regional and long-term goals across government and other organizations, the MVEIRB is often criticized for focussing too little on substance and too much on process. For instance, the Information Request (IR) process is considered too formal and legalistic. The MVEIRB rules of procedure (MVEIRB, 2004b, 8) describe the process:

All Information Requests are issued under the Review Board's authority and shall be submitted to the Review Board for distribution to the party from whom information is being requested.

The IR process is used each time a party seeks information from another party. This process can result in a party refusing to fulfil the request with the provision of adequate justification. This can occur if the party requesting information has not strategically moulded the request to conform to the terms of reference and rules of procedure (i.e. MVEIRB, 2003b, rules 36-40). Confusion associated with this legal formality is exacerbated by the lack of clarity among those unfamiliar with EA in Canada's North. Intervening parties and the proponent do not always have access to adequate guidelines and early guidance documents. This lack of access has been blamed for increased frustration and increased uncertainty in the process from the perspective of intervening parties. These findings support a "Lessons Learned" study of the Snap Lake EA process, which was initiated by the Board. The study highlights the IR process and technical sessions as two process issues that should be improved upon (MVEIRB, 2005). These procedural problems, however, could be mended with more time and more experience and have already improved since the Snap Lake Diamond Project EA. One representative of the MVEIRB admits that it "made some mistakes" during the IR process, but contends that "[they] haven't done that since". Representatives from intervening parties also find that the process has been improving, as clear communication and flexibility in process are becoming the norm. Moreover, new guidelines and former EAs have been made available for proponents and are accessible both online and on compact disc from the Board⁹.

4.5 Meaningful Decisions

The MVEIRB is a quasi-judicial Board designed to make decisions in a fair and balanced manner. EA is commonly criticized for the federal Minister's discretionary decision-making power, use of unenforceable guidelines, and lack of adequate follow-up. This evaluation finds that, while the Board is significantly limited in enforcing its decisions, they succeed in conducting decision-making in a fair and meaningful manner.

As a quasi-judicial Board, the MVEIRB is bound by the rules of natural justice (MVIERB, 2004a, 4). Their decisions are further guided by legislation, rules of procedure,

⁹ The online web address is www.mveirb.nt.ca.

guidelines, and other more informal project management processes. Many respondents describe the Board's decision-making process as "open," "balanced," and "fair". Nevertheless, the word "political" has also been applied. Including politics in decision-making has often been interpreted as a bias in favour of government interests (e.g. Nikiforuk, 1997). It is quite the reverse for this so-called "political Board", which views politics as inspiration for critical thinking in the decision-making process. One Board representative claims that the Board's strength is not in the member's technical skills, but in the "value system that you bring to the table". According to one Board representative, decisions to determine significance are consensus-driven and based on a 50% likelihood of occurrence, which allows for less technical studies (e.g. traditional knowledge studies, intrinsic value of wilderness) to inform decisions and provides for flexibility in making decisions. The Board's embrace of politics and its procedural discretion allows for a unique critical evaluation of the issues, where significance can differ for each individual Board Member. This differs from the conventional disconnected and process-focused decision-making of traditional EA (Lawrence, 2003).

The decision-making process also benefits from the progressive nature of the Board. Not only does the MVEIRB draw on earlier EAs to learn from them, but the Board is also a standing Board, making Members quite receptive to learning. The Members remain on the Board for a three-year renewable term (*Mackenzie Valley Resource Management Act*, S.C. 1998, s. 14), while former Environmental Assessment Review Process (EARP) Guidelines Order and newer CEAA panels are *ad hoc* and only stay together for the duration of the EA (S.C. 1992; *National Energy Board Act*, R.S.C., 1985, SOR/84-467). One Board representative finds that the Board's approach contributes to learning and notes that the Members can "develop their own policies and procedures [and] can improve them".

While the MVEIRB conducts a fair and rigorous decision-making process, the responsible Minister still possesses significant influence over the Board. For instance, the former Minister of Indian and Northern Affairs, Robert Nault, unilaterally appointed a chairperson of the MVEIRB in 2002, despite the Board's other nominations. More recently, the current Minister, Andy Scott, appointed this same person to be Chair of the Mackenzie Valley Land and Water Board despite this Board's four other nominations (CBC, 2005). The Minister was asked to defend his "controversial appointment" to I20 concerned citizens who attended a meeting in Yellowknife for his first visit to the territory. A former member of

MVEIRB commented on the unwelcome partiality of this Ministerial-Chair relationship: "the chair was originally designed to work very closely with the board, and the Minister would be at arm's length" (CBC, 2004a). In addition to appointing a chairperson, the Minister must consider the report on the EA and make a final decision. However, the MVRMA (S.C. 1998, s.130) limits the decisions that the Minister can make; that is, the Minister can either agree with the MVEIRB and request no modifications, refer the EA back to the Board and request modifications, or reject the report and order the most rigorous assessment stage under the MVRMA, Environmental Impact Review (EIR). The potential influence on the Board and its decisions from the Minister is mitigated by the requirements of the MVRMA. As such, this concern is less significant than the complete absence of project-specific EA follow-up. This evaluation finds that the MVEIRB EA process does not have any apparent mechanism (neither in practice nor in design) to evaluate the effectiveness of a particular EA.

One fundamental deficiency of the MVEIRB EA process is commonly identified in the critical EA literature – inadequate EA follow-up (Morrison-Saunders et al., 2003; Noble & Storey, 2005). Follow-up consists of a variety of processes (i.e. monitoring, auditing, evaluating effectiveness, and evaluating decisions). EA is often criticized for superficial follow-up application and, more often than not, its complete absence (Morrison-Saunders & Arts, 2004). As stated in section 4.2, the MVEIRB recognizes the importance of reducing uncertainty and using adaptive management. At the same time, however, the MVEIRB does not have the jurisdiction to ensure that EA recommendations are adopted. It is the *ex ante* nature of EA, which relies so heavily on predictive mechanisms, that an effective follow-up program intends to address. The MVRMA (S.C. 1998, s.134) allows for a project-specific follow-up program but only under the most rigorous type of assessment, the environmental impact review (though no EA has yet been referred to this type of EA). Part 6 of the Act requires an environmental monitoring and auditing program, but has not yet been fully implemented by the responsible Minister. It is significant that some aspects of follow-up are required under the MVRMA. In fact, follow-up is rarely practiced or even mentioned elsewhere in Canadian EA legislation. While CEAA allows for project-specific follow-up if the responsible authority feels a program is "appropriate in the circumstances", many provincial EA systems do not practice any form of follow-up. For example, British Columbia's *Environmental Assessment Act* does not have any specific regulatory provisions for monitoring or for other follow-up programs (S.B.C. 2002).

Despite some design provisions for follow-up, the MVRMA does not effectively inform project outcomes. There is no reason to believe that the EA process does not influence project outcomes at all; indeed, EA is designed be one part of an integrated resource management framework where recommendations feed directly into the regulatory process. The following statement made by a representative of the MVEIRB explains:

The statute was designed to integrate land and water management and EA. The statute includes part 6, which provides for periodic environmental monitoring. This not only looks at trends in the environment but it also looks at how well the institutions are working to achieve the goals of the statute.

While the integrated aspect of the regulatory system meets EA "best practices" (e.g. Gibson, 2000), the MVRMA does not effectively inform project outcomes because it lacks a mandatory requirement to ensure the realisation of its recommendations. The MVRMA does not have an effective mechanism to enforce or evaluate the effectiveness of a particular EA. The responsibility of ensuring that the recommendations are enforced rests with the Minister of INAC (S.C. 1998, s.130); however, it is not apparent that this authority has been actively used to manage EA outcomes. Instead, part 6 of the Act has alternative provisions for more locally-driven follow-up: (1) broad environmental audits that focus on cumulative effects and EA accuracy rather than EA effectiveness; and (2) regulatory instruments that aim to manage project outcomes even though EA recommendations do not perfectly "fit" in them. On the other hand, the Nunavut Impact Review Board issues a binding EA certificate that acts as a regulatory instrument for all of the recommendations in an EA (*Nunavut Waters and Nunavut Surface Rights Tribunal Act*, S.C. 2002).

Part 6 of the MVRMA requires that regular audits be completed to assess cumulative effects and monitor these effects over the entire Mackenzie Valley. The audits, however, are quite broad (i.e. audits can occur over the entire Mackenzie Valley and assess any number of variables), infrequent (i.e. audits occur up to once every 5 years), and not directed towards project management (S.C. 1998). Instead of managing project-specific outcomes, audits tend to focus on the overall accuracy of predictions in order to learn and improve upon future EAs. While learning is necessary, critics argue that assessing the accuracy of EA is secondary to assessing the effectiveness of a particular EA and actively managing project outcomes (e.g. Noble & Storey, 2005).

The regulatory institutions, which are set up to implement and enforce EA recommendations and are relied on to manage project impacts, are fragmented and full of significant gaps. As argued in sections 4.2 and 4.3, the scope of the MVEIRB EA and its resulting recommendations are quite holistic. The regulatory framework that catches these EA recommendations, however, is based on the diverse regulatory requirements of various responsible authorities. The resulting regulatory system is disjointed where EA recommendations fail to "fit" into any one legislative instrument and, instead, a number of unrelated instruments attempt to enforce the recommendations. For instance, Appendix G lists the responsible authorities and the regulatory instruments each authority issues for a diamond mine in the NWT. Furthermore, these instruments do not catch all of the recommendations outlined in the report of EA. For example, the Fisheries Act (S.C. 1985) makes it clear that an authorization from the Department of Fisheries and Oceans and compliance with its requirements (including EA recommendations) is necessary before fish habitat can be destroyed. Similar legislation for air quality, wildlife, social, and cultural impacts does not exist in the NWT. One Board representative describes one of many situations in which legislative gaps fail to enforce some types of recommendations:

What happens when you are talking about a migratory terrestrial species like caribou? That is every bit as important or more and there is no way to pick it up. They don't need any type of permit from the Government of the NWT.

The disjointed nature of post-EA follow-up, however, is more integrated than most processes in Canada. The MVRMA acts to "provide for an integrated system of land and water management in the Mackenzie Valley", where land and water boards throughout the Mackenzie Valley issue permits and licenses based on corresponding EA recommendations from the MVEIRB (S.C. 1998, preamble). However, holistic compliance monitoring and project management is not apparent in the MVRMA. Instead, voluntary agreements appear to address this need for the three diamond mines that have been approved in the NWT. This novel approach to EA will be looked at in more detail in chapter five.

4.6 Partnership

The previous three sections have described the qualities of the MVEIRB EA process that meet the normative criteria outlined in chapter two. Most of these qualities also contribute to this criterion – partnership. These partnership qualities have been characterized

as follows: a broad scope that includes impacts that are relevant to the local public; balanced methods that are open to public participation and meaningful integration of TK; long-term and regional goals (like managing cumulative effects that disproportionately impact northern aboriginal residents); and, meaningful decision-making that integrates local knowledge and less technical studies with previously over-represented scientific knowledge.

One benefit of a co-managed environmental assessment regime is the formation of a partnership from a traditionally adversarial process (Nikiforuk, 1997; O'Faircheallaigh, 1999; Rees, 1980). In Sherry Arnstein's (1969) seminal paper on citizen involvement in planning, "citizens can enter into a *partnership* that enables them to negotiate and engage in trade-offs with traditional power holders" (3). While critics of the MVEIRB EA system feel that the Board is failing to achieve this partnership in practice, the co-managed nature of the Board requires considerable cooperation between aboriginal citizens and the government. As mentioned earlier, aboriginal organizations and the responsible Ministers each appoint half of the Board Members (*Mackenzie Valley Resource Management Act*, S.C. 1998, s.112). In practice, the Members tend to be from the North and the Minister that makes the final decision resides in Ottawa. The power to make decisions on EA, then, appears to be distributed fairly among aboriginal people, local citizens, and government decision makers.

The co-managed approach also tends to be largely transparent (though a small number of Board deliberation meetings are not open to the public). This openness of the MVEIRB EA process also lends itself to partnership, in which the general public is given a significant amount of potential to influence EA outcomes. In particular, "public concern" can be a sufficient cause to trigger a project from a screening assessment to a full environmental assessment (*Mackenzie Valley Resource Management Act*, S.C. 1998, s. 125(2)(a)). If adequate capacity is not paired with an EA, however, it becomes apparent that triggering an EA is not synonymous with having access to an EA. In fact, one representative from an aboriginal organization stated, "you are almost scared to trigger an EA because it just means it will be twice as much work for you", alluding to already strained human resources. Pursuant to subsection 26(5) of the MVRMA, the Board only provides participant funding for the more infrequent type of EA, an environmental impact review (MVEIRB, 2004a, 40). As stated above, an environmental impact review has not been conducted since the time the MVRMA was proclaimed by the federal government in 1998. One Board representative highlights this problem:

One of the barriers is capacity – the capacity of interested parties to participate in the process. Typically there's financial capacity, there's HR capacity, there's also a knowledge capacity.

Intervening parties do not have fair access to participate in the MVEIRB EA process. The gaps in financial capacities, human capacities, and the capacity for knowledge apparently stem from the initial financial inequality that exists between participants, the lack of skilled and trained workers in the North, and the inherent lack of knowledge to accurately predict potential impacts of a project undergoing an EA. These gaps are further aggravated by the expensive demands of the MVEIRB EA process, which stems from the impressive depth and breadth considered in most EAs.

According to a number of respondents, the MVEIRB EA model is expensive for all parties involved. Many intervening parties cannot afford to conduct adequate reviews of assessments, especially without intervener funding. For example, small and less complicated projects that traditionally have taken less time to assess can take the same amount of time as larger projects under the MVEIRB EA process (CBC, 2004b). This problem of strained capacity, then, is not exclusively due to lack of funding, but is also due to overly broad assessment scope. Some respondents have called the MVEIRB process "out of control" by trying to predict everything, which inadvertently discriminates against small developers in favour of large ones with deeper pockets.

A second factor that significantly stresses party capacity in an EA is the lack of baseline knowledge that is accessible to assess impacts. Gathering knowledge on less tangible issues (e.g. social, cultural, wildlife, and air quality) requires a number of skilled individuals, time, and financial capacity to adequately generate, assess, and make recommendations (Meredith, 1992). Furthermore, the MVEIRB EA process is quite new and the NWT is very large, so collecting baseline data is extremely difficult. The "knowledge capacity" is also insufficient for predicting impacts, especially cumulative impacts and their causes. This is problematic for the government and the public. For instance, determining the cause of an increase in alcohol abuse in a community becomes an almost impossible task with the current social scientific methods. A number of changes across the territory could potentially contribute to this effect, leaving scientists with no reliable evidence to identify causal linkages to a particular development. Without the ability to prove causality, the government and the public do not have adequate evidence to justify rules that might impose

on company practices. There is also a gap in financial and human capacities to generate usable traditional knowledge. One respondent describes "a lack of qualified people at the community level to identify and collect TK". In fact, elders face language and cultural barriers to passing on their unique knowledge to younger generations. If the current capacity to collect this knowledge is not urgently addressed, this knowledge will be lost with time.

Finally, the financial capacity of each party fundamentally determines the degree to which a party can participate in any EA. For instance, a company like De Beers Canada has a significantly larger ability to defend their interests in the technical review than that of the North Slave Métis Alliance or even the federal government. In fact, many aboriginal organizations decide not to participate in the EA process because of the immense expense. One MVEIRB representative states, "at least in my experience over 20 to 25 years, it's always about a real disparity in resources and capacity on two sides." This decision to opt out, however, is not synonymous with trust in government. Indeed, the sentiment of some aboriginal leaders is quite the opposite.

The legacy of aboriginal-government relations in the North also poses as a barrier to achieving partnership; aboriginal parties do not trust the government, remain dissatisfied with the EA process, and often approach EA in a decidedly adversarial manner (Wismer, 1996). While historical actions surrounding treaty obligations play a significant role in cultivating this mistrust, more recent actions like poor mining regulation and the virtual non-action of governments also play a significant role.

The relatively recent mining legacy in the NWT has left the aboriginal people with few benefits and many expenses. Similar to other parts of the world, mining has adversely impacted aboriginal people in the Mackenzie Valley by weakening ties to their traditional economy, disrupting cultural, social, and natural environments, disrupting family and community structures, and resulting in a significant loss of useable land (O'Faircheallaigh, 1991 in Kennett, 1999a). One aboriginal representative explains that the mistrust boils down to "how they have been left out in the past, how they can't trust government to regulate mining companies." The rather relaxed government regulations of recent past are often blamed for so-called "horror stories." One such horror story surrounds the Royal Oak Mines' Giant Mine located within the city limits of Yellowknife. Still fresh in the minds of local residents, this mine is recognized for a devastating multi-million dollar environmental clean up (some estimates are in the billions) and provided little, if any, residual benefits for

aboriginal people (O'Reilly, 1999). While a new regulatory regime is in place under the MVRMA, aboriginal organizations continue to mistrust the processes and the government responsible for them.

Mistrust directed at the government is problematic for the MVEIRB. One Board representative explains, "We are still mistakenly seen as being connected as an appendage of INAC." Even the creation of the MVRMA (S.C. 1998) by the Gwich'in and Sahtu Dene and Métis Land Claim Settlement Acts (S.C. 1992; S.C. 1994) is contested as an imposition on some of the First Nations and Métis that have not yet settled their land claims in the Mackenzie Valley. One aboriginal representative states, "That's their agreement. They should not dictate to the [aboriginal organization]¹⁰ people how they can issue our land."

When mistrust is directed towards parties that implement and participate in an EA, the process often becomes a more arduous task than necessary. One representative from an aboriginal organization points out that many aboriginal organizations hire external consultants during the EA process to review the technical EIS:

Groups have gone out and actually hired consultants and experts and lawyers to just review documentation because presumably there is a lack of trust by them with those who are charged with responsibility with those areas... Why should I, as a community, be spending money on that work, when I should just be making sure that people are hearing and addressing those concerns somehow rather than actually studying it myself?

This quotation illustrates that mistrust further diminishes the financial capacity of aboriginal organizations to participate in the EA process. Mistrust also leads to an EA process based in conflict where, oftentimes, EA is used as political leverage to present other non-related issues. One government representative argues that a challenge facing EA "is mixed agendas that get carried into the EA process, sometimes EA is used to leverage benefits in other areas." For instance, often the first priority of aboriginal groups without a land claim is to settle their land claim. This agenda is often brought into the EA process and, at the same time, is dismissed by government as inappropriate to discuss. From the perspective of these aboriginal groups, this agenda is necessary to discuss during an EA in order to provoke a response from the government. At the same time, however, these agendas impede the EA process.

¹⁰ The name of the First Nation organization that this respondent is referring to is kept confidential to protect the identify of the respondent.

Aboriginal groups are not the only parties to hold this mistrust. Many other parties involved neither trust the proponent to be impartial when participating nor the federal Minister to make a fair final decision. One representative from the MVEIRB describes a common perception in the Mackenzie Valley: "companies literally will appear in front of the Board or in front of an EA panel and they will simultaneously be in the Minister's office". While the initial MVEIRB EA process is open and fair, the final decisions that are being made in the Minister's office are suspect to prejudice. Also, according to one Board representative, the current mining exploration regulations bias a pro-development agenda, where EA is almost obliged to approve the proposed project. The free entry system allows mining companies to not only claim a block of land, but also to invest significant amounts of money in exploration, planning, research, and infrastructure, even before triggering an EA. One Board representative claims that this is problematic: "the company has invested tens or hundreds of millions, who knows. And it is extremely difficult from a political standpoint to say no".

It is apparent that the MVEIRB EA process fails to meet the partnership normative criterion that would ensure all interested and affected parties are given fair consideration. The inherent lack of trust in the EA process, the government, and the proponent from a variety of parties also leads to a degree of struggle beyond what is necessary. These trust and capacity deficiencies make the process longer, financially straining, and unfair for many parties involved. They cannot be fully addressed by the MVEIRB, but must be solved in cooperation with other parties. Voluntary agreements appear to address this deficiency of the MVIERB EA process.

4.7 Includes Benefits

Usually considered the driving force behind resource developments, economic benefits related to such developments are often left out of an EA. By not addressing these and other benefits, however, there is no venue for considering broader and more positive goals like sustainability and environmental justice. Instead, EA tends to simply strive for the "best worst-case" scenario. As mentioned in section 4.2, the MVEIRB EA process does consider benefits. One approach to integrating benefits in EA is by implicitly seeking sustainable development as a positive substantive goal (Gibson, 2002).
While sustainable development is not a stated goal in the MVEIRB's guiding legislation, one Board representative stresses that it is a goal in practice. By addressing benefits, this respondent claims, the MVEIRB EA process is better suited towards achieving sustainable development than other processes, even an inherently environmentally unsustainable practice like mining:

The EA decisions can be operationalized when taking a sustainable development approach. They can take some innovative approaches to beneficially affect the economic circumstance of the area, or the social circumstance, or even culturally enhance an area through benefits derived from a non-renewable resource development.

This consideration is significant given that most jurisdictions completely ignore benefits in their assessments. However, this consideration is not designed to follow through to regulatory stages.

As outlined in section 4.2, the MVEIRB EA process considers benefits but is not required to deliver them to EA recommendations. Instead, the *Mackenzie Valley Resource Management Act* refers to recommendations as "such measures as it considers necessary to prevent the significant *adverse impact*" (S.C. 1998, s. 128(1), italics added). In turn, the MVEIRB is not obliged to require regulatory agencies to enshrine benefits in regulatory instruments. Given that benefits-related issues are not necessarily enforced in regulatory instruments, the EA process cannot guarantee that broad goals like sustainable development can be attained in practices that are environmentally unsustainable like mining and other non-renewable resource developments. As mentioned in the section above, these types of developments require economic and social benefits – at the bare minimum – to achieve social and economic sustainability and contribute to sustainable development.

While the MVRMA does not require that benefits-related issues be included in recommendations, the Board has done so on occasion. For instance, the Snap Lake Diamond Project EA recommendation number 36 requires that the Socio-Economic Agreement include employment and procurement targets and provide a portion of rough diamonds from the mine to the local NWT secondary mining industry (MVEIRB, 2003a). These Board decisions to occasionally include benefits-related issues in recommendations (thereby requiring regulatory agencies to enforce them) are up to the Board's discretion. Similar to traditional knowledge, the MVIERB EA process is not designed to integrate benefits-related issues in EA

recommendations, but will integrate benefits-related issues in practice. While providing fair benefits is not required under the MVRMA, voluntary agreements appear to address this need for the three diamond mines that have been approved in the NWT.

Throughout the evaluation presented in this chapter, frequent criticisms of the MVEIRB EA process have been highlighted. Many of these appear to be temporary problems that are not fundamental to the process and may be resolved as the MVEIRB EA process continues to develop and the participating agencies continue to adapt to it. Other criticisms may be more enduring and reflect fundamental deficiencies of the EA process.

The MVEIRB EA process fails to meet the complete set of normative criteria, where decisions made by the Board at the EA stage are not adequately enforced and partnerships are not fully realized. While rigorous cumulative effects monitoring at a regional level is required, project-specific follow-up programs are not. In addition, while partnerships are pursued in design, most participants, particularly aboriginal participants, have less capacity and, therefore, unequal access to the EA process. Likewise, the MVEIRB EA process is significantly burdened by the adversarial approach taken by parties as a result of their mistrust towards government, the proponent, and sometimes the MVEIRB. Lastly, the MVEIRB EA process does not require that EA recommendations integrate benefits-related issues, which presents a barrier to achieving sustainable development in cases where positive social and economic outcomes are necessary to help off-set environmentally unsustainable practices like mining.

4.8 Summary of Chapter and Conclusions

According to findings in this evaluation, the MVEIRB represents a "best-case" EA process. The MVEIRB achieves this by using a comprehensive definition of environment, incorporating traditional knowledge and local knowledge in a meaningful way, using learning as a tool to improve, and being fair and rigorous in its decision-making process. However, many limitations were also identified. A number of limitations outlined in this chapter may fade away as the process further develops and matures (e.g. burdensome information request process) while others may arise in the future (e.g. TK may be valued less than science if future Board Members do not practice this) or may be more enduring. Of particular concern are the potentially enduring deficiencies such as the need for building capacity through funding and skills development, and the establishment of a mechanism that guarantees the

fulfilment of recommendations and commitments addressed in the EA. Mistrust will likely be less of a problem as parties become more familiar with the improved processes and aboriginal land claims and self-government issues are settled. However, these criticisms remain outside of the control of the MVEIRB and only upon addressing these issues can the principles outlined in the MVRMA be more effectively achieved. As such, the possibility of using supraregulatory agreements such as IBAs to offset these deficiencies has been proposed.

The theoretical rationale for supraregulatory agreements was discussed in chapter two, where it was hypothesized that these agreements stem from the fundamental deficiencies of the EA process. Based on the findings highlighted in Table 4.1 and sections 4.5, 4.6, and 4.7, it is inferred that supraregulatory agreements stem from the deficiencies in practice and design of the MVEIRB EA process. Supporting these findings, chapter five will summarize findings from an explicit interrogation of the rationale for these agreements through key informant interviews, concluding that supraregulatory agreements do indeed arise from the deficiencies of EA. In particular, these agreements arise from those deficiencies identified in this chapter: inadequate follow-up to enforce decisions made during the EA process, lack of capacity and trust among aboriginal stakeholders, and disregard for benefits and compensation associated with natural resource developments that are necessary to ensure lasting positive outcomes.

5 INTERROGATING RATIONALE FOR SUPRAREGULATORY AGREEMENTS AMONG KEY INFORMANTS

5.1 Introduction

Supraregulatory agreements - legally binding, project-specific, negotiated agreements that have no basis in legislation – are increasingly used in tandem with environmental assessment (EA) in Canada's North. These instruments are now an expected part of the planning and management process for large mining developments in the Mackenzie Valley, despite the fact that they remain largely unlegislated. O'Faircheallaigh (1999) assessed a negotiated approach to EA that was used in northern Australia; like supraregulatory agreements, the negotiated approach is conducted alongside an EA and consists of "negotiation processes designed to produce legally binding agreements with developers that address the aspirations and concerns of indigenous people" (1999, 67). The author also refers to the limited research that has been conducted on negotiated EA (e.g. Coombs et al., 1989; Corbett, 1990; Justus & Simonetta, 1982) and the evident need to conduct more detailed research. Indeed, little research has been devoted to supraregulatory agreements and, in particular, research conducted in a Canadian context (e.g. Klein et al., 2004; O'Reilly, 1999-2000; Sosa & Keenan, 2001). And what has been done is largely limited to a legal perspective (e.g. Keeping, 1999-2000; Kennett, 1999a, 1999b). This chapter seeks to address this research gap by interrogating the perceived rationale for supraregulatory agreements among aboriginal and governmental representatives, signatories, and decision makers in the Mackenzie Valley region of the Northwest Territories (NWT).

Chapter four concluded that the Mackenzie Valley Environmental Impact Review Board (MVEIRB or "the Board") EA process represents a "best-case". In particular, the Board successfully meets many of the normative criteria devised in chapter two through its comprehensive definition of environment, use of traditional and local knowledge, and fair and rigorous decision-making process. While this EA process is better than average, four key deficiencies are apparent: (1) a follow-up program that does not adequately harness EA recommendations; (2) mistrust felt among many stakeholders; (3) poor capacity among

certain stakeholder groups that discourages them from participating; and, (4) a disregard for benefits that are necessary to encourage positive outcomes. Based on these findings, it is inferred that supraregulatory agreements function to address these EA deficiencies. This opinion is consistent with O'Faircheallaigh's (1999, 67) stated rationale for a negotiated approach to EA, where he argues that negotiated EA stems from,

Almost a total failure to address the issue of how the findings and recommendations generated by impact assessment can be effectively fed into decision-making processes, and so help bring about outcomes that generate a more favourable balance of benefits and costs for indigenous people.

Conforming to O'Faircheallaigh's supposition and the apparent deficiencies of the MVEIRB EA process identified in chapter four, the perceived deficiencies expressed by key informants in this chapter provides further support for this research hypothesis. That is, supraregulatory agreements are a function of EA deficiencies and more specifically respond to the following rationales: (1) to address follow-up in a more comprehensive and enforceable manner; (2) to build positive relationships among signatories for the life of the mine; (3) to build capacity among government and aboriginal groups to adequately participate in follow-up programs; and, (4) to secure benefits associated with mining for the Government of the NWT and aboriginal groups. A summary of the findings discussed in this chapter is presented in Table 5.1.

Each of these four main rationales is described in a section, which is broken down into rationales for three types of supraregulatory agreements (i.e. Impact and Benefits Agreements (IBAs), Environmental Agreements, and Socio-Economic Agreements), as they were negotiated for the Ekati, Diavik, and Snap Lake Diamond Mines in the Mackenzie Valley, NWT. As outlined in chapter three, this assessment is based upon semi-structured indepth interviews with individuals representing aboriginal organizations (i.e. the Yellowknives Dene First Nation, the Łutsel K'e Dene First Nation, the North Slave Métis Alliance, and the Dogrib Treaty 11 Council) and the government (i.e. the Government of Canada and the Government of the NWT), some of which have been involved with negotiations and decision-making relating to these agreements. In other words, rather than infer the rationale for these agreements, as was done in chapter four, this chapter identifies rationales as explicitly expressed by aboriginal signatories and relevant government officials. Accordingly, this chapter reviews findings from these interviews.

Table 5.1:Findings from Interrogating Rationale for Supraregulatory Agreements.Agreements stem from apparent deficiencies of EA identified in chapter four (i.e.inadequate follow-up; mistrust among participants; inadequate capacity; and, unequalflow of benefits).For each of these deficiencies, a rationale for each supraregulatoryagreement is presented.Grey boxes indicate no apparent rationale.

EA Deficiencies	Rationale for supraregulatory agreements	Impact and Benefit Agreement	Environmental Agreements	Socio-Economic Agreements
Inadequate Follow-up	Effectively inform decision-making	 Catch benefits- related issues excluded from recommendations Perceived as enforceable contracts, like permits 	 Fills federal responsibility to follow-through on recommendations Aims to regulate in more holistic manner 	 Fills GNWT responsibility to regulate socio- economic impacts
Lack of Trust	Build positive relationship	 Create sense of partnership Create mutually dependent "good neighbours" 	 Cooperation through monitoring agencies Improves transparency, public involvement, impartiality 	 Cooperation through monitoring agencies De Beers Agreement conveys partnership discourse like IBAs
Unequal Capacity	Relieve capacity strains	 Does not explicitly provide funding or capacity building for EA follow-up 	 Avoids increasing capacity strain of government for follow-up 	 Avoids increasing capacity strain of government for follow-up, given increased developments to monitor
Unequal flow of benefits	Secure local benefits	 Compensation for adverse impacts Share benefits from mine Contributes to sustainable development of GNWT 	Does not aim to secure benefits	 Fulfils GNWT responsibility for economic development

It is significant to note here that this thesis does not assess the effectiveness of these agreements and, therefore, cannot comment on the degree to which supraregulatory agreements might meet the goals of Gibson's advanced EA (2002) or environmental justice. Moreover, this chapter only describes interview findings that reveal the rationale for IBAs and other supraregulatory agreements, even though many aboriginal respondents and a number of other respondents have been quite critical of negotiations for supraregulatory agreements.

5.2 Moving towards Adequate *Follow-up*

The findings presented in the previous chapter show that the MVEIRB EA process has specific provisions for cumulative effects monitoring on a regional scale and integrated land and water management. Like most other EA processes in Canada, however, the MVEIRB EA process does not have a formal mechanism for project-specific follow-up. The first key rationale for supraregulatory agreements stems from this inadequacy of the EA process. These instruments, therefore, aim to effectively feed EA recommendations into an enforceable project-specific follow-up program.

5.2.1 Impact and Benefits Agreements

In following with the character of northern EA, the MVEIRB EA process creates a forum for raising a broad set of issues. Oftentimes, however, there is no formal mechanism to follow all of these issues through to the regulatory phases. While many issues obviously fit into certain regulatory instruments (e.g. water quality, fish habitat), other issues – including benefits-related issues and cultural issues – do not fit in any instrument. IBAs aim to catch these residual issues that are of concern to the aboriginal signatories in a legally binding instrument. One northern non-government analyst agrees, IBAs intend "to make sure that nothing falls off the table":

In the days before BHP... there were real issues raised in the hearings that fell through the cracks. That's what these things [IBAs] are addressing.¹¹

In particular, aboriginal groups use IBAs to address benefits-related issues and mitigation measures (that may or may not be raised by the signing aboriginal group in an EA) and are excluded from EA recommendations.¹²

As discussed in chapter two, benefits-related issues are particularly ignored in EA. Chapter four supports this argument by observing that the Board is not required to make recommendations for securing benefits. Nonetheless, the Board documents benefits-related issues raised throughout the EA on the public record. In response, supraregulatory agreements function to address benefits in a legally binding manner. For instance, issue

¹¹ The respondents are not identified by name in this chapter, but are described by the group they represent. The name and job title of each key informant are described in Appendix B.

¹² While Environmental Agreements and Socio-Economic Agreements are explicitly referred to in EA recommendations, IBAs are not. The degree to which issues discussed in an EA and EA recommendations are integrated into IBAs is unclear since these agreements are private (Klein et al., 2004).

number 143 addressed in the EA for the Snap Lake Diamond Project concerns the need for De Beers to commit "to 'hiring targets' for Aboriginals or Northerners" (MVEIRB, 2003a). While the Snap Lake Diamond Project IBAs are not settled at this time, the *Yellowknives Kwe K'a Ndi Participation Agreement,* between Diavik Diamond Mines Inc. and the Yellowknives Dene First Nation in 2000, requires that the Implementation Committee – consisting of half Diavik Diamond Mine Inc. representatives and half Yellowknives Dene representatives – shall "develop and achieve targets for Yellowknives Dene employment" (DDMI, Schedule C, 3(c)).

IBAs also address the need for enhancing existing cultural environments and mitigating potential adverse impacts affecting cultural environments. In fact, some of the most important issues discussed in IBAs concern the maintenance of traditional culture. One independent analyst claims that IBAs aim "to document and to protect, to the extent possible, TK before the elders pass on". IBAs also have provisions for mitigating adverse impacts that intend to protect the unique social structure and culture of the signing communities. For instance, the *Participation Agreement* (DDMI, 2000c) requires Diavik Diamond Mine Inc. to "keep the site free of non-medical drugs and alcohol" and serve "country food at the Diavik mine site" in order to prevent addictions and medical problems. There are further provisions that address potential adverse impacts on mine workers' families. Specifically, the Yellowknives Dene Representative, defined in Schedule B of the agreement, is responsible for developing "counselling and support programs" and using "criteria and indicators for monitoring the social and economic impacts" associated with the mine $(4(e))^{13}$.

Of great importance to many respondents is the binding nature of IBAs. According to one respondent, these Agreements aim to "cement in or ensure the commitments". This enforceability gives assurances to signatories beyond the EA process, which is essentially only an advisory process (Couch, 2002). One government respondent considers that IBAs act like a "safety belt". Likewise, one independent analyst considers that IBAs are "a permit for social and cultural impacts" that legislated regulatory instruments are not designed to manage. For many aboriginal representatives, however, "an IBA is security". This "security" does not necessarily refer to EA follow-up. In fact, many aboriginal representatives state that IBAs aim to secure compensation, recognize tenure rights, and

¹³ This program has been faced with a number of problems, including access to adequate data from the company (personal communication).

secure assurances that the company will listen to aboriginal groups. This rationale for IBAs will be discussed in more detail in subsection 5.5.1.

5.2.2 Environmental Agreements

According to government and aboriginal respondents, Environmental Agreements stem from inadequate legislation governing EA follow-up in the NWT. Based on this rationale, then, these agreements first aim to enforce EA recommendations, which concern environmental impacts and are not addressed in other regulatory instruments. Second, these agreements address the fragmented nature of existing EA follow-up and aim to combine all environmental measures into one comprehensive instrument. In addition to the first two rationales, these agreements address an unavoidable problem of environmental planning: uncertainty. The third rationale for these agreements, then, is to create an adaptive management approach.

A number of government respondents assert that Environmental Agreements aim "to capture those issues that aren't captured in the normal regulatory instruments" such as land use permits and water licences. For instance, one aboriginal respondent states that the Dogrib Treaty 11 Council are primarily concerned with three issues – as highlighted by their community elders – surrounding all three diamond mines: protecting caribou; protecting water; and protecting their land. While it is clear that these issues have been the three most important issues for the Dogrib communities, legislation in the NWT does not require a legislative permit to safeguard against potential impacts on migratory wildlife like caribou. Furthermore, legislation in the NWT does not have provisions for requiring project-specific monitoring programs with respect to caribou. It is stated in the Mackenzie Valley Resource Management Act, however, that the government responsible for caribou and air quality is required to "act in conformity with the decision to the extent of its authority", where a "decision" is an approved EA recommendation (1998, s. 130(5)). This means that the responsible authority (i.e. Minister of Resources, Wildlife and Economic Development for the Government of the NWT) is obliged to follow though on EA recommendations that concern caribou. There are similar provisions under CEAA, which were imposed during the Diavik Diamond Project's EA (S.C. 1995, s. 20(1.1)). The Environmental Agreements, therefore, respond to this government obligation, where EA recommendations that exist beyond the scope of legislation in the NWT are enshrined in these agreements. The recommendations enshrined in these agreements include air quality monitoring programs,

wildlife management and monitoring programs, and independent environmental monitoring agencies. The recommendations also integrate traditional knowledge in follow-up. Many aboriginal respondents claim that this last provision, integrating traditional knowledge in follow-up, is one of the most important issues that these Agreements address:

[The monitoring agencies] have got to watch the moose, the caribou, the falcons, even the medicine plants. Our involvement in this process is that they ask for our traditional knowledge – the knowledge of the Elders.

Second, government respondents claim that Environmental Agreements stem from a fragmented follow-up system that does not reflect the long-term needs of northern ecosystems. That is, ecosystem components that seem interdependent in nature are artificially separated from one another to meet the needs of different government agencies. For instance, two separate mechanisms are designed to protect an aquatic ecosystem: a water licence is designed to protect water quality (Northwest Territories Waters Act, S.C. 1992, s.14) and a *Fisheries Act* authorization is designed to protect fish habitat (S.C 1985, s. 5(f)). One government respondent states that Environmental Agreements aim to "improve the integrity of the ecosystem and ensure the longevity of resources for future generations". According to the agreements, this is achieved by facilitating "the use of holistic and ecosystem-based approaches" (DDMI, 2000a, 1.1(c)). For instance, monitoring programs combine a number of ecosystem components from caribou to air quality, and security deposits are consolidated, increased, and spread over a longer-term. One government respondent states that these agreements also help the NWT move towards a more "regional cumulative effects" approach to environmental management. This occurs in two ways. Firstly, these agreements explicitly require cumulative effects studies. For example, article 8.1 of the Snap Lake Environmental Agreement describes a rigorous and collaborative approach towards cumulative effects assessment and monitoring. Secondly, the Environmental Agreements encourage an integrated management framework. The Snap Lake agreement illustrates this best by explicitly requiring companies, which traditionally withhold information from other companies with which they are in direct competition, to share data and manage cumulative effects in a cooperative manner. The Snap Lake agreement explicitly states that De Beers must "use its best efforts to collaborate with Diavik Diamond Mines [and] BHP Diamonds" and must participate in ongoing government cumulative effects monitoring programs (s. 8.1(c)). Once the provisions in this agreement

are fulfilled, then all three diamond mines in the NWT shall be monitored by one "Multi Party Environmental Monitoring Agency" (2004, s. 4.1).¹⁴

The third rationale for environmental agreements stems from the limitation of the *ex ante* nature of EA. Since MVEIRB is limited to making "advisory" recommendations, as respondents confirm, the Board cannot fully engage in *ex post* follow-up. Like the other agreements, Environmental Agreements aim to address uncertain project outcomes such that when a surprise event occurs, the appropriate monitoring agency responds to the event. The monitoring agency shall point out the company's legal requirements (as enshrined by this and other regulatory instruments) and recommend an immediate action and corresponding amendments to the company's management plan. This adaptive management approach seems to assure stakeholders that if any unpredicted impact arises it will be adequately managed.¹⁵ One respondent agrees:

You can't always fully predict what the impacts are going to be... [The Agreements] flag potential problems that might come up that can put on the brakes and try to deal with them before it's too late.

5.2.3 Socio-Economic Agreements

Similar to Environmental Agreements, government respondents claim that Socio-Economic Agreements stem from a regulatory authority's responsibility to ensure that EA recommendations are addressed in a regulatory instrument where no authorization is currently required. Since the Government of the NWT is responsible for providing social services, Socio-Economic Agreements ensure that these responsibilities are fulfilled with respect to diamond mining developments. Based on this rationale, these agreements aim to catch potential social and economic impacts not covered by legislation in the NWT.

These agreements address gaps in legislation that concern social and economic issues in the NWT. According to the Comprehensive Study Report for the CEAA-led Diavik Diamond Project EA, a Socio-Economic Monitoring Agreement is one "formal mechanism to ensure the mitigative measures outlined in Diavik's submissions... are appropriately implemented" (CEAA, 1999, x). While the Diavik Diamond Project Socio-Economic

¹⁴ Discussions for this agency are moving ahead. In the meantime, a temporary Snap Lake Monitoring Agency, similar to the preceding monitoring agencies, is slowly being established. It is responsible for monitoring the Snap Lake Project only (personal communication).

¹⁵ Stakeholders are particularly concerned about the potential impacts of the Snap Lake Mining Project, which is located within the migratory route of the Bathurst caribou herd and is the first project that the Lockhart drainage basin has experienced.

Agreement explicitly states its aim to enforce the socio-economic EA recommendations, the Snap Lake and Ekati Diamond Projects' agreements do not. However, the EA recommendations in the Snap Lake Diamond Project's Report on EA do state that the Socio-Economic Agreement should include particular provisions. This is further illustrated by comparing the recommendations and the agreements, where recommendation 36 from the Report on the EA for the Snap Lake Diamond Project (MVEIRB, 2003a) states, "The GNWT Socio-Economic Agreement shall include the commitments given by De Beers to employment (including training targets) and procurement targets," and section 3.4 of the Snap Lake Diamond Project Socio-Economic Agreement ensures that these employment targets will be met (DBC, 2004b). Like the other supraregulatory agreements, the issues included in the agreements do not exclusively deal with EA recommendations.

5.3 Moving towards a Relationship based on *Trust*

As discussed in Chapter 5, the negative legacy associated with mining and its careless regulation in the NWT has cultivated a deep sense of mistrust among aboriginal residents. This mistrust has been directed towards government, the proponent, and even co-managed decision-making boards. One aboriginal respondent considers that the "mistrust with how government has been regulating mining industries in the past" is one motivating factor for using these agreements. The key rationale, then, for supraregulatory agreements stems from this sense of mistrust among the aboriginal signatories and the people they represent. To address this problem, supraregulatory agreements aim to create relationships among formerly opposing groups that are based on partnership and cooperation.

It is necessary to note that the legacy of mistrust is not exclusive to EA, but has a much broader scope. Therefore, supraregulatory agreements do not exclusively stem from mistrust in EA, but also stem from the legacy of mistrust directed towards the entire resource planning process.

5.3.1 Impact and Benefits Agreements

Stemming from a sense of mistrust associated with past mining practices, IBAs aim to build cooperative and mutually positive relationships between aboriginal signatories and the proponent. These agreements frame the legal relationship between signatories with words evoking a sense of partnership and mutual responsibility. According to a number of aboriginal and non-aboriginal respondents, however, these agreements also aim to create inequality by requiring aboriginal groups to make undesirable sacrifices in exchange for inadequate benefits. In effect, this reduces the ability of aboriginal groups to challenge a poor process in court and increases the pace in which these projects are approved.

The choice of words used to describe the relationship between signatories in IBAs conveys a sense of cooperation and a sense of commitment over the life of the mine. Analysts have noted this language use as a common feature in IBAs (e.g. Kennett, 1999a); likewise, this language is illustrated in the principles of the Participation Agreement between the Yellowknives Dene First Nation and Diavik Diamond Mine Inc., which are: Mutual Respect, Active Partnership, and Long-term Commitment (DDMI, 2000c). The Participation Agreement between Diavik Diamond Mines Inc. and Dogrib Treaty 11 Council uses a similar language, where the agreement aims to "establish a relationship based on confidence, trust and certainty… based upon the principles of mutual respect, active partnership and long-term commitment" (DDMI, 2000a, 1).

Again stemming from a sense of mistrust, IBAs commit both signing parties to not only act like "good neighbours", but also act like professional partners. One aboriginal respondent points out that aboriginal people have "been left out in the past" and IBAs act as a "foundation" for "how to involve aboriginal people with the project". IBAs aim to *create* a partnership that is based on "mutual trust, mutual respect, and mutual understanding". An IBA,

Formalizes that relationship and how we are going to work together. And [IBAs formalize] what commitments [the mining companies] are willing to make and our commitment to cooperate with the mining companies. So it's an agreement that works for both parties.

This mutual dependency stems from both the proponent's need for clear access to aboriginal traditional land, where tenure rights remain unclear, and aboriginal groups' interest in receiving economic benefits like employment, contracts, and money.

A number of aboriginal and non-governmental respondents agree that IBAs do indeed stem from a legacy of having "been left out in the past". However, these respondents argue, more cynically, that IBAs are like historical Treaties between aboriginal groups and the federal government. As such, these agreements stem from government and developers' interest in clarifying the legal rights of aboriginal people and aim to limit these rights with respect to the diamond mine developments. From this perspective, IBAs function to perpetuate a regressive relationship based on inequality and conflict. A number of aboriginal respondents justify their rationale for using these agreements and state that agreeing to them simply meant getting *something* – no matter how small – from the development. Indeed the agreements provided something where nothing better was offered. Not only do they feel that IBAs do not provide sufficient benefits, but they also feel that these benefits do not adequately offset the amount of sacrifices their people were required to make with respect to land tenure and control. One major item that IBAs required aboriginal signatories to sacrifice, for example, is their interest in asserting tenure rights over the area where the development takes place. Section 4(d) of the Participation Agreement restricts the Yellowknives Dene from challenging Diavik Diamond Mines Inc. for infringing on their rights and interests as they apply to the project (DDMI, 2000b). This means that they cannot challenge the surface and mineral tenure rights given to the developer as it is outlined in government authorizations and permits. A number of aboriginal respondents regret that their organization signed these agreements (personal communication).

Also stemming from this more cynical rationale, some government and nongovernmental respondents see IBAs as a means to avoid confrontation and conflict in the courts rather than a means to create a good working relationship between the developer and aboriginal groups. Here, certain conditions in IBAs function to avoid confrontation between these two groups at a minimal cost to the government and the developer; it is economically desirable, "to have people who don't want to shoot bullet holes through your signs". It is also in the interest of the federal government to ensure that the fiduciary obligation¹⁶ has been fulfilled to reduce the potential for court challenges that are both costly and slow down the approval process. In fact, IBAs do function to avoid conflict in this manner. One nongovernmental respondent agrees, IBAs "provide the overall acceptability of a development" and function to speed up the process in order to reduce government and company expenditure. While this might have been the case for the Ekati Diamond Project's IBA, the Diavik and Snap Lake Diamond Projects' IBAs were not all signed before the permits and authorizations were issued. Some aboriginal respondents claim that their "hammer" (i.e. the clout each player had before the project approved) has been softened in these subsequent negotiations when project approval was issued before IBAs were signed. Today, some

¹⁶ See Keeping (1999, 67) for comprehensive description of fiduciary obligation.

aboriginal respondents claim that De Beers is not very interested in cutting a good deal with aboriginal groups since the mining projects have already been approved. Appendix A shows this discrepancy in timing between project approvals and signing IBAs for each of the three diamond mining projects.

5.3.2 Environmental Agreements

Similar to IBAs, Environmental Agreements stem from the "horror stories" of past mining governance and the consequential mistrust felt by aboriginal groups. These agreements aim to encourage a constructive relationship among aboriginal groups, government, and the proponent by establishing independent monitoring agencies that function to monitor and report on proponent actions.

Unlike the small firms that once mined gold in the NWT, these diamond-mining firms are transnational and have the capacity to reach out to aboriginal groups and build partnerships. Environmental Agreements aim to harness this ability and establish cooperative relationships between large companies, governments, and aboriginal groups by creating independent monitoring agencies. To illustrate, section 4.2 of the Diavik Diamond Project's Environmental Agreement and section IV.2 of the Ekati Diamond Project's Environmental Agreement describe the general aims of the independent environmental agencies. They are paraphrased as follows:

- to integrate traditional knowledge in follow-up design;
- to disseminate information to Aboriginal people and the general public on matters relevant to the Monitoring Agency's mandate;
- to provide an "effective means" or a "meaningful role" for all parties to get together and review the Project and the implementation of monitoring plans. The Diavik Agreement claims in addition to the Ekati Agreement that it will "implement a co-operative approach to achieving the purposes";
- to participate as an intervener, when appropriate, in the dispute resolution process under this Agreement and (in the case of Diavik) in the regulatory process;
- to create a public watchdog for the regulatory process and the implementation of this Agreement.

The above terms show how these agencies not only aim to create a better follow-up process (e.g. including traditional knowledge that is not formally included in regulatory instruments), but also aim to improve upon existing relationships among companies, government, and aboriginal groups. In particular, these agencies promote trust through three

goals: open communication (i.e. term 2), aboriginal involvement (i.e. term 3), and creating a credible authority (i.e. term 5).

First, the monitoring agencies promote open communication by establishing a forum for open dialogue between experts and enforcing the obligations of the Environmental Agreements for communication and consultation among signatories. For instance, the agencies communicate with the Government of the NWT who are experts in wildlife, INAC who are experts in water, and elders who are experts in TK. The agencies also provide a forum for communities to voice their concerns about potential environmental effects throughout the mines' existence. Government respondents highlight this communicative function, where communities have "opportunities for cooperative arrangement, where they are working with the company, working with the government... having some involvement, and having that opportunity for information exchange". Exhaustive yearly reports are one way in which the agencies can both encourage information exchange and enforce the company's obligations for communication and consultation with communities. These reports are published in both technical and plain language allowing for more readers to get involved in the agency. They also help to enforce the commitments made by signatories in the Environmental Agreement by making recommendations to both regulators and the company (IEMA, 2003-2004a, 2003-2004b). According to subsection IV.5(b) of the Ekati Diamond Project's Environmental Agreement, these recommendations are not binding but they must be considered and then addressed by responsive action or verbal justification for no action (BHP, 1997a).

Second, the monitoring agencies promote public and aboriginal involvement by trying to involve representatives from aboriginal communities, seeking their membership on the Agency's boards, and seeking traditional knowledge expertise. While the Independent Environmental Monitoring Agency (established by the Ekati Diamond Project agreement) employs environment experts on their decision-making board, the Environmental Monitoring Advisory Board (established by the Diavik Diamond Mine agreement) employs aboriginal community members on their board. The Independent Environmental Monitoring Agency, however, does directly and frequently consult with communities. One government respondent notes,

[Aboriginal communities] want to be involved all the way through: birth, life, after death [of the mine]. And so I think the Environmental Agreements provide

that opportunity for further community public involvement on what's happened with the project.

Many aboriginal respondents see the monitoring agencies as a tool to promote involvement by integrating traditional knowledge in follow-up:

I think it has changed the way people think about consultation and traditional knowledge. It will consult with the community first I think and has representatives from each community and holds onto them and that's their job is to participate on [Diavik's monitoring board] and funds are provided to do that.

This not only incorporates a new approach to follow-up that is not included in other regulatory mechanisms (see subsection 5.2.2), but also encourages community traditional knowledge experts to get involved in monitoring the project.

Lastly, many respondents highlight that the agreement establishes a reliable and credible "watchdog agency" to manage the environmental impacts of the project. As a credible regulatory authority, the agency aims to become a more trusted alterative to government and proponent-led monitoring by not only monitoring the actions of the company, but also monitoring the actions of government. One government respondent agrees, "we need people out there challenging – we need questions asked of government and of industry. So I think [the monitoring agencies] help provide that".

5.3.3 Socio-Economic Agreements

Similar to Environmental Agreements and IBAs, Socio-Economic Agreements stem from the legacy of mistrust felt by aboriginal community members towards government and the proponent. In response, Socio-Economic Agreements aim to promote a positive relationship between aboriginal, government, and proponent stakeholders. Similar to the independent monitoring agencies established by the Environmental Agreements, Socio-Economic Agreements establish advisory boards (also called a Socio-Economic Monitoring Agency in the case of the Snap Lake Diamond Project) that aim to achieve this relationship by encouraging open communication. Also, these agreements are similar to IBAs in their use of language that evokes a sense of partnership.

The advisory boards established through these agreements promote communication and cooperation among stakeholders in a number of ways. While the Ekati Diamond Project's Socio-Economic Agreement only has provisions for an *ad hoc* committee that

ensures the agreement is implemented (BHP, 1997b), the other agreements describe a number of roles for the advisory boards that fit this rationale. For example, the advisory boards aim to provide information and advice to the communities and other stakeholders, provide opportunities for public participation, make recommendations for mitigation measures to communities and other stakeholders, and, in the case of the Snap Lake Diamond Project's agreement, issue an annual report that is presented in a public meeting. Unlike the independent monitoring agencies established by the Environmental Agreements, however, the advisory boards are made up of the "parties to the agreement" which include the company, the Government of the NWT, and the designated impacted aboriginal groups.

A number of government respondents claim that Socio-Economic Agreements are the equivalent to IBAs but for the Government of the NWT instead of aboriginal groups. This similarity is especially evident in the language used in these agreements, which conveys a sense of partnership and cooperation that intensifies from the earliest to the most recent agreement. According to their purposes and principles, these agreements aim to create a cooperative, fair, and respectful relationship between the Government of the NWT and the proponent. For example, subsection 2.1.6 of the Ekati Diamond Project Socio-Economic Agreement (BHP, 1997b) and section 1.1 of the Diavik Diamond Mine Socio-Economic Monitoring Agreement (DDMI, 1999) state that the agreements aim to build a relationship based on "the spirit of cooperation and with mutual respect for the goals and aspirations of" each party. Section 2.2 of the Snap Lake Diamond Project Socio-Economic Agreement highlights "cooperation", "fairness", "respect", and "sustainable development".

5.4 Moving towards Greater *Capacity*

As outlined in chapter five, the capacity demands of MVEIRB EAs are intense and tend to strain financial and human capacities among many participants. The third key rationale for using supraregulatory agreements stems from the inadequate capacity available to EA participants, particularly in the follow-up stages of EA where broad recommendations from MVEIRB must be implemented and enforced by responsible authorities. In response, Environmental Agreements, IBAs, and Socio-Economic Agreements aim to secure proponent funding for improving EA follow-up programs.

5.4.1 Impact and Benefits Agreements

While not a key rationale for IBAs, these agreements seem to vaguely respond to the lack of capacity available to aboriginal stakeholders in EA follow-up. While not exclusively dedicated to follow-up for EA recommendations, IBAs aim to secure proponent funding for social and economic monitoring programs. For instance, the *Yellowknives Kwe K'a Ndi Participation Agreement* from 2000 establishes an Implementation Committee that consists of two Diavik Diamond Mine Inc. representatives and two Yellowknives Dene Representatives and is funded by Diavik Diamond Mine Inc. This committee is responsible for ensuring that the agreement is implemented and also evaluates and assesses the results of the agreement on an annual basis (Schedule C, 3(f)). This rationale for IBAs, however, was not mentioned in key informant interviews. A recent study ranking the social responsibility of Canadian mining firms highlights the need for firms to "address power imbalances faced by affected communities", suggesting that firms should provide funding to hire experts to research project impacts (ROB & JRI, 2005, 54).

5.4.2 Environmental Agreements

A number of respondents are concerned that the formal regulatory system is not adequately funded. They feel the system is deficient in its capacity to generate adequate knowledge, human resources, and financial resources to fulfill broad EA recommendations that are characteristic of northern EA. Environmental Agreements aim to secure the necessary funding from the proponent for follow-up programs that include a budget for independent monitoring agencies. As discussed in subsection 5.2.2, the monitoring agencies are an addendum to the existing regulatory framework. The agreements, then, aim to avoid increasing stress on government resources and, at the same time, improve the follow-up programs. One non-governmental respondent agrees:

You need a certain amount of money and resources to do the monitoring... Only industry has the resources to enable that.

Having the opportunity to tap into the resources of industry improves the monitoring system in a manner that government could not have supported alone.

5.4.3 Socio-Economic Agreements

Socio-Economic Agreements stem from the Government of the NWT's lack of capacity for conducting adequate follow-up, which requires monitoring and managing a wide

range of issues. In particular, these agreements stem from the government's lack of capacity for following through on their responsibilities to the residents of the territory given the increased magnitude of impacts from the booming non-renewable resource industry. Unlike the federal government the Government of the NWT is not receiving resource revenues to offset this added expense associated with monitoring and follow-up programs. In response, these agreements aim to support an expanded follow-up program that concerns the potential social and economic impacts of the booming diamond mining industry.

Socio-Economic Agreements stem from the inadequate capacity of the Government of the NWT to provide follow-up programs in light of the fairly recent demands on the regulatory system by the current booming non-renewable resource industry. The Deputy Premiere of the NWT Jim Antoine frankly described his government's dilemma in October 2003:

As a government, we are going broke, which is the result of the mining and the oil and gas development... [,] the increased fiscal pressures on this government and the increased demand for our services as government (LANWT, 2003, italics added).

In order to address this problem, Socio-Economic Agreements aim to establish agencies to monitor potential impacts and benefits associated with particular diamond mines. These agencies are funded equally by the proponent and the GNWT in the case of the Diavik Diamond Mines Socio-Economic Monitoring Agreement (s. 2.1.16) and the Snap Lake Diamond Project Socio-Economic Agreement (s. 8.7.2). Ekati Diamond Project's agreement does not have provisions for funding (s. 8.5; Schedule H).

5.5 Moving towards Maximising *Benefits*

As discussed in chapter two, EA does not typically address the need to maximize benefits associated with resource developments. While the MVEIRB EA process does address benefits in an assessment, it is not designed to address benefits in EA recommendations. Therefore, regulatory agencies are not obliged to carry benefits-related issues forward to a follow-up program or a regulatory instrument. The fourth and potentially the most important key rationale for Socio-Economic Agreements and IBAs arises from this deficiency. IBAs and Socio-Economic Agreements aim to secure economic benefits associated with resource development for aboriginal groups and citizens of the NWT,

respectively. Environmental Agreements do not deal with securing economic benefits and, for this reason, will not be reviewed in section 5.5.

5.5.1 Impact and Benefits Agreements

According to aboriginal and government respondents, IBAs stem from the inadequacy of EA in providing economic benefits associated with resource developments to aboriginal residents. As a response to this deficiency, IBAs aim to secure economic benefits associated with mining for aboriginal signatories by directing proponent resources to aboriginal communities. These economic benefits contribute to both sustainable development interests of the Government of the NWT and capacity building and sovereignty interests of many aboriginal groups.

First, IBAs allow for aboriginal signatories to share in some of the economic benefits associated with the mine. Most of the monetary benefits have traditionally gone to the federal government who collects resource revenues. One non-government respondent agrees, claiming that IBAs stem from "the fact that the majority of the tax and royalties and a lot of the benefits that flow from these projects go to the federal government". In response, IBAs aim to ensure that monetary benefits are also being directed to the aboriginal communities in the NWT, effectively bypassing the government. Other benefits include employment and contracts, which have also traditionally flowed to southern workers and companies. In order to promote greater access to upper-managerial positions for aboriginal people in the North, IBAs also aim to provide training and scholarships to members of aboriginal signatory groups. Describing the sentiments of many aboriginal people who have not been given opportunities like this before, one aboriginal respondent states, IBAs represent "a move towards bettering a way of life for the aboriginal people in the area".

Securing benefits for aboriginal people in the NWT also contributes to the long-term goals of the Government of the NWT. The GNWT is interested in building greater capacity in communities, which conforms to the economic portion of their sustainable development mandate. "Generally you are talking about building community capacity" states one nongovernment respondent when asked about the goals of IBAs. One government respondent claims that the capacity-building aims of IBAs fulfil one "part of sustainable development. Any development should provide the maximum economic benefit to the most affected communities".

Securing benefits also contributes to long-term goals of aboriginal communities. A central goal for many of the aboriginal groups who signed IBAs with diamond mining companies in the NWT is to settle land claims. (While the Dogrib Treaty 11 Council recently had the Tlicho Agreement passed through Parliament, other groups have not yet settled their claims.) Many First Nation respondents assert that they can negotiate for compensation for the use of their land through IBAs in the form of cash payments:

[The companies] recognize that we gave up portions of our traditional land use areas for their project and so that is the reason why they agreed to that compensation.

One non-governmental respondent agrees, highlighting the need to compensate for destroying parts of traditional land is two-fold:

I think there are two things... [1] Compensation for destroying part of your backyard, whether that is land, water, or air and then [2] Benefits for being present there. Ultimately, if there is a sawmill from across the street from where I live and it's my land or my traditional area that I use, then I should at least be benefiting from it. I should be able to work there maybe get some training maybe get my kids sent to university for a couple of years.

IBAs aim to secure compensation for aboriginal signatory groups in exchange for the use and potential destruction of traditional land. IBAs are similar to agreements described in existing comprehensive land claim agreements in the North, like access agreements that may be voluntarily negotiated to provide benefits like cash payments (e.g. *Sahtu Dene and Métis Comprehensive Land Claim Settlement Act*, 1994, s. 27.2.3).

IBAs are consistent with the concept and practice of compensation in EA, where regulatory bodies such as the Department of Fisheries and Oceans allow compensation for destroying fish habitat when mitigation is not feasible. To create benefits associated with mining, in the cases of unsettled claim areas, the "mitigation" measures are either no development or settling a land claim. Since both options are not usually feasible to achieve in a short period of time, it is necessary to provide compensation as an alternative.

5.5.2 Socio-Economic Agreements

Like IBAs, Socio-Economic Agreements stem from the perceived deficiencies of EA in providing economic benefits associated with diamond mining. While the MVEIRB EA process is not designed to make recommendations on benefits-related issues, some EAs do

make benefits-related recommendations in practice. Stemming from this rationale, then, Socio-Economic Agreements aim to secure benefits associated with diamond mining in the NWT. While IBAs also aim to secure these benefits, Socio-Economic Agreements aim to secure benefits for everyone in the NWT, not just aboriginal residents.

While the GNWT does not yet have jurisdiction over its natural resources or the revenues generated from these resources, the GNWT is responsible for economic development. For instance, the Government of the NWT is responsible for a number of recommendations in the Snap Lake Diamond Project's Report on EA, including two recommendations that concern benefits aimed at economic development. As described in subsection 5.2.3, recommendation 36 from the Report on the EA for the Snap Lake Diamond Project states that the Socio-Economic Agreement must include the company's employment commitments, including training and procurement targets (2003a). In order to follow-through on this responsibility, the Government of the NWT also requires sufficient financial capacity. However, their net fiscal benefit is too small, estimated at 8 of percent the federal benefit. One non-government respondent agrees:

You will see Mr. Handley's view of this is the GNWT is going broke trying to cope with development, which is truly only benefiting the government of Canada... The problem is distributional; the money is not coming back to the place where the impacts are being helped.

Socio-Economic Agreements aim to help mend this economic disparity by trying to secure greater economic benefits for the citizens for the NWT from the developer. These agreements aim to secure jobs in the NWT by designing training programs, securing a quantity of rough diamonds to support the diamond polishing industry, and establishing hiring preferences for northern residents, of which all are funded, in part, by the developer.

5.6 Summary of Chapter and Conclusions

This chapter describes the rationale for supraregulatory agreements among aboriginal and government decision makers and signatories. Based on in-depth interviews with key informants representing these groups, this chapter concludes that supraregulatory agreements are a function of deficiencies apparent in the EA process. Most notably, these agreements respond to the inadequate flow of information from EA recommendations to follow-up, the lack of trust felt by aboriginal participants towards developers and the government, and the inadequate capacity available for follow-up designed to fulfil EA recommendations. IBAs and Socio-Economic Agreements also aim to ensure that sustainable economic development, aboriginal sovereignty and capacity, and the economic development responsibilities of the Government of the NWT are addressed under the aegis of economic benefits throughout the life of the project. All of these rationales are outlined in Table 5.1.

This research did not purposely explore the outcomes of supraregulatory agreements; nevertheless, some preliminary insights were revealed in this chapter. Varying by type, supraregulatory agreements appear to realize a number of their rationales. Environmental Agreements are the most obvious example, where environmental monitoring agencies have received positive reviews from aboriginal stakeholders and in the environmental assessment follow-up literature (e.g. Noble & Storey, 2005; Ross, 2004)¹⁷. A number of respondents highlight that the agencies' strengths lie in their ability to employ a participatory approach to environmental monitoring and follow-up. They have been lauded for their accessible and transparent process and their effective collection and integration of traditional knowledge. Government respondents have also noted the important role the agencies play in evaluating both companies and government. One drawback of these agreements, according to respondents, is their project-specific nature and, therefore, Environmental Agreements are not appropriate for assessing cumulative effects of multiple projects. At this time, the Snap Lake Diamond Project's Environmental Agreement aims to address this deficiency by integrating the first two monitoring agencies to make a single regional agency (Ross, 2004). The degree to which IBAs and Socio-Economic Agreements have been successful is less clear.

Respondents have suggested that the socio-economic effects of the diamond industry are mixed, even with the agreements in place. While economic benefits appear to be accumulating in communities, social costs also appear to be burdening many communities. Coupled with the costs of socio-economic programs, the territorial government appears to be

¹⁷According to a number of respondents, the Independent Environmental Monitoring Agency resulting from BHP Billiton's Agreement is lauded for its technical and scientific expertise and the Environmental Management Advisory Board resulting from Diavik Diamond Mines' Agreement has successfully involved community consultation and TK (Ross, 2004). The Snap Lake Monitoring Agency and its subsequent "Multi-Party Environmental Monitoring Agency" aims to combine the merits of both previous agencies by coordinating a core group made up of aboriginal signatory groups, a science and technical panel, and two TK working groups (DBC, 2004a, s. 4.5).

strained. The degree to which IBAs and Socio-Economic Agreements offset these costs is not clear, but many respondents are sceptical of their success.

Respondents have especially criticized IBAs. First, these agreements are largely confidential¹⁸ and, as a result, conflict with the public nature of EA. The Snap Lake Report on EA illustrates this problem:

A false sense of security may have developed among the Parties to the EA based on their assumptions about the matters, which will be addressed and resolved by these agreements... there is no guarantee as to their contents (MVEIRB, 2003a, 23).

Many aboriginal groups are also frustrated with the outcomes of these agreements. The expectations many groups held for IBAs remain unfulfilled. Against the wishes of aboriginal groups, many IBAs were settled after the mining project received regulatory approval. Instead, groups wish that IBAs were a prerequisite for project approval, as they are in a number of settled aboriginal claim areas. In this way, negotiations may make use of the political leverage they have before the project is approved. Some aboriginal groups are also disappointed with the amount of compensation rewarded relative to the size of social and environmental risks and company profits. And finally, given that many of these groups decisively wish to govern their own land and resources, IBAs act as an unnecessary appendage and, to some extent, a barrier to reaching these larger goals. Akin to EA, some aboriginal groups are dissatisfied with these agreements.

¹⁸ IBAs signed by BHP Billiton and De Beers Canada are completely confidential. However, the IBA signed by Diavik Diamond Mines Inc. are not confidential with the exception of one section that details the monetary payments.

6 SUMMARY AND CONCLUSION

6.1 Thesis Summary

Large resource developments in Canada's northern hinterlands have contributed to immense environmental and social damage mainly experienced by aboriginal communities. While a number of practitioners and scholars maintain that conventional environmental assessment (EA) is the best approach for reducing negative outcomes associated with these developments, some remain critical of its effectiveness and fairness. Supraregulatory agreements, as manifest in IBAs, Socio-Economic Agreements, and Environmental Agreements, are increasingly being used alongside the EA process in Canada's North. Focussing on a case in the Mackenzie Valley, Northwest Territories (NWT), this thesis has sought to explain the rise of these agreements from the perspective of the local (typically oppositional) community and government.

It has been argued that these agreements function to address the interests and needs of aboriginal people and government by ensuring that the results of EA "shape the outcomes" of resource developments (O'Faircheallaigh, 1999). This contention forms the basis for my hypothesis: aboriginal groups and governments recognize inadequacies associated with the conventional EA process and are using supraregulatory agreements to secure certain outcomes that EA does not adequately provide. In order to assess the validity of this hypothesis, three tasks were pursued: (1) a literature review; (2) an evaluation of the Mackenzie Valley Environmental Impact Review Board EA process; and (3) a direct assessment among aboriginal and government representatives and signatories.

The first task reviews the critical EA and environmental justice literatures and is summarized in chapter two. This review identifies six key limitations associated with the EA process in Canada. By taking the inverse of these deficiencies, six normative criteria were devised and then applied to complete the second task. Chapter three introduces the Mackenzie Valley as the case study area and presents the research process that was undertaken to complete the final two objectives.

The second task undertakes an evaluation of the MVEIRB EA process by applying the six normative criteria devised in the literature review. This evaluation highlights the strengths and weaknesses found in the MVEIRB EA process. Based on these findings, a rationale for the rise of supraregulatory agreements was inferred and summarized in chapter four. In short, the MVEIRB is a "best case" EA process due to a number of factors including its comprehensive definition of environment, meaningful use of traditional knowledge and local knowledge, use of EA as a learning tool, and its reasonably fair and rigorous decision-making process. While many respondents outline the need for the Board to fully develop and mature as a process, other concerns that appear to be entrenched in the process were identified. The EA process does not adequately build capacity, does not develop a trusting relationship with stakeholders, remains unenforceable, and does not adequately facilitate benefits. These deficiencies are summarized in Table 4.1. These represent the first half of the findings sought in a two-fold approach, which were then used to direct the research approach in the third task.

The third task directly assesses the perceived rationale for the rise of supraregulatory agreements among key informants. This task required a direct interrogation of the rationale for the rise of supraregulatory agreements by using in-depth interviews with aboriginal and government decision makers and supraregulatory agreement signatories. These findings are summarized in chapter five. Supporting the findings inferred in chapter four and O'Faircheallaigh's original contention, chapter five concludes that supraregulatory agreements are a function of perceived EA deficiencies. Most notably, these agreements respond to the inadequate flow of information from EA recommendations to follow-up, the lack of trust felt by aboriginal participants towards developers and the government, and the inadequate capacity available for follow-up. IBAs and Socio-Economic Agreements also aim to ensure that sustainable economic development, aboriginal sovereignty and capacity, and the economic development responsibilities of the Government of the NWT are addressed under the aegis of economic benefits throughout the life of the project. All of these rationales are outlined in Table 5.1.

6.2 Contributions of the Research

6.2.1 Scholarship

This research contributes to the bodies of scholarship associated with (1) EA effectiveness, (2) supraregulatory agreements, and (3) environmental governance.

EA effectiveness is a common concern in the critical EA literature (e.g. Cashmore et al., 2005; Hunsberger et al., 2005; Nikiforuk, 1997; Noble & Storey, 2005; Rees, 1980). Public participation and follow-up are often cited in the critical EA literature as two central areas where Canadian EA requires significant improvement (e.g. Hunsberger et al., 2005; Sadler, 1996). Correspondingly, this literature has cited supraregulatory agreements and, in particular, Environmental Agreements as an effective response to these deficiencies (e.g. Armitage, 2004; Couch, 2002; Noble & Storey, 2005; O'Faircheallaigh, 1999; Ross, 2004; Stiff, 2001). This research supports these findings.

Given the unique nature of IBAs, Environmental Agreements, and Socio-Economic Agreements to the NWT, however, the degree to which a generalization can be inferred from these findings is somewhat limited. Since the content of supraregulatory agreements responds, in part, to a unique situation arising out of the Mackenzie Valley (e.g. revenues flow to Ottawa, land claims under negotiation, fragmented environmental legislation, few non-aboriginal residents), it is not possible to say that *all* supraregulatory agreements stem from the deficiencies of EA. However, the EA process in the Mackenzie Valley is considered to be a "best case" by both this and other research. Logically, since supraregulatory agreements stem from the deficiencies of a "best case" EA process, then, where similar agreements exist in other jurisdictions, they are likely to stem at least in part from the deficiencies of EA as well. Given this logic, then, the findings further suggest that where an EA of lesser quality than the MVEIRB process exists, it is likely that a demand for supraregulatory agreements also exists.

These research findings also add to the central criticisms of follow-up and participation in EA that are common to the scholarship by highlighting an area that is often neglected in EA: consideration of benefits. While some EA analysts argue that considering benefits simply adds to the economic momentum already pushing for project approval (e.g. Nikiforuk, 1997, 18), this research supports a number of authors who contend that benefits should be considered if positive outcomes like sustainability can be attained (e.g. Gibson, 2000, 2001, 2002; Hunsberger et al., 2005; Noble & Storey, 2005). Supraregulatory agreements respond to this goal by aiming to re-distribute economic benefits among various land users for positive and fair economic outcomes and to encourage positive environmental and social outcomes.

This contention highlights a larger debate within the critical EA effectiveness literature. As suggested in chapter two, a group of theorists, the *EA pessimists* (e.g. Mulvihill & Baker, 2002; Nikiforuk, 1997; Rees, 1980; Wismer, 1996), maintain that EA is flawed at its roots and requires significant changes. Another group, the *EA optimists* (e.g. Couch, 2002; Gibson, 2002), claim that while EA is flawed today, the existing process can be improved upon to reach substantive goals such as sustainability. Contributing to this debate, this research finds particular flaws in the process, but supraregulatory agreements respond to these flaws and could potentially lead to different project outcomes. In other words, this research supports both views. In accordance with the *EA pessimists*, a number of critics argue that the rise of IBAs affirms their cynicism towards the integrity of EA (e.g. Mulvihill & Baker, 2001); there will always be a demand for alternative approaches like these agreements unless the process is radically altered. Consistent with the EA optimists, critics claim that the rise of supraregulatory agreements improves the current process (e.g. Couch, 2002); this addition will help the process achieve substantive goals. Before a conclusion can be made that supports either group of theorists, it is necessary to conduct more research addressing the relationship between these agreements and EA; that is, are these agreements an integral part of EA? Or are they an addendum to the process, used only when a company wishes? Further research is also necessary to address the effectiveness of these agreements; that is, do these agreements truly represent an improvement upon EA?

Most significantly, this research responds to the limited knowledge concerning supraregulatory agreements. In accordance with O'Faircheallaigh (1999), this research finds that supraregulatory agreements arise from deficiencies identified in the EA process. While this research did not purposely explore real outcomes of these agreements, preliminary findings indicate that supraregulatory agreements, and in particular IBAs, have not necessarily functioned to satisfy EA deficiencies. Indeed, supraregulatory agreements do not entirely fulfil stakeholder expectations.

The relationship between state-led environmental regulation and voluntary environmental governance is also of particular importance for these research findings. It is argued that corporate environmental governance regimes arise from a number of circumstances, such as failures of earlier international governance initiatives and, at the domestic level, citizen demand for more effective regulation paired with reduced resources available to combat environmental problems (Cashore, 2002). Voluntary regimes allow for

greater funding and flexibility to address these past failures (Patchak & Smith, 1998). This research finds that state-led EA often lacks adequate capacity to follow through on recommendations and equally involve interested parties. Supporting these arguments espoused in the corporate environmental governance literature, supraregulatory agreements stem from the failures of state-led environmental governance.

6.2.2 Practice

The findings of this research are valuable to EA practice by, (1) revealing strengths and weaknesses of a best case EA process and (2) lending support to those seeking, or arguing for, the use of supraregulatory agreements alongside of conventional EA processes.

The strengths of the MVEIRB EA process are its comprehensive definition of environment, meaningful use of traditional knowledge and local knowledge, use of EA as a learning tool, and employment of a fair and rigorous decision-making process. These aspects of EA are applied in practice and design and are largely considered favourable to government and aboriginal respondents. These findings flag aspects of the MVEIRB process that work well and, as such, are likely to work well elsewhere.

It is also useful to note that the MVEIRB EA process does not provide adequate follow-up measures, facilitate adequate capacity and trust, or emphasize benefits. Given these four notable deficiencies, it is useful for practitioners to consider these not only with respect to the jurisdiction of the Mackenzie Valley but also in other jurisdictions. Since supraregulatory agreements aim to deal with these problems in the Mackenzie Valley, other jurisdictions experiencing similar problems may want to consider using them.

There are situations where the use of these agreements is not appropriate, however. For instance, if the EA process were to change radically from the conventional model practiced in Canada and the Mackenzie Valley, there may be no need for supraregulatory agreements. Additionally, Socio-Economic Agreements would not be appropriate in many jurisdictions where subsurface resource royalties and benefits accrue regionally. Similarly, these agreements will likely be rendered useless in the NWT when the federal-territorial devolution agreement is finalized, although IBAs and Environmental Agreements will still be necessary. And in jurisdictions where stakeholders hold little legal power (e.g. nontraditional land users who live close to a development or traditional land users who reside

outside of a designated area of impact), firms may not wish to negotiate these agreements in good faith or negotiate them at all¹⁹.

6.3 Future Research Needs

This research has sought to systematically explain the rise of supraregulatory agreements in one region and in this the research has been successful. It is apparent that the next key stage of research in this area is to determine the perceived effectiveness of the agreements from the perspectives of both signatories. That is, do they work? During the course of this research, significant anecdotal evidence was revealed that offers insight to this second research question. Some evidence suggests that these agreements, and in particular IBAs, have produced many positive outcomes. One independent expert explains:

All of a sudden the big guys come along. And they really are going to leave behind them a workforce with a whole lot of transferable skills. And that's the relationship side of it too. You are going to leave behind a lot of people that say, "You know the best damn job I ever had was working for BHP?" These are aboriginal people talking. They train – they got summer students in there. The Dogrib, before BHP came along in 1995 or so, they had 2 or 3 students in post-secondary studies. They have over 150 now. There are scholarships – there are co-op training arrangements. That's what these IBAs do. I think that maybe these companies might have done it anyway. Let's just say that in order to make it work, the IBAs were really important.

While this respondent feels that IBAs are a step forward in planning mining developments, other respondents identified significant weaknesses associated with IBAs and other supraregulatory agreements. For instance, the two IBAs under negotiation between De Beers and two Dene Nations (i.e. the Lutsel K'e Dene First Nation and the Yellowknives Dene First Nation) have not yet been settled, even though the mine proposal was approved in June of 2004. The apparent poor timing of the process, according to one aboriginal respondent, has undermined the partnership function of IBAs, where the negotiation leverage that the aboriginal groups once had may be only rebuilt if the groups threaten civil disobedience or a lawsuit.

¹⁹ This has been the case in the Mackenzie Valley, where one member Nation of the Akaitcho Treaty 8 First Nation, the Deninu K'ue, was considered outside of the impacted area for the Diavik Diamond Mine Project. As a result, the group did not negotiate an IBA even though they felt they were entitled to an agreement (personal communication).

It is clear that systematic research is required to determine the overall effectiveness of supraregulatory agreements. In particular, it would be useful to assess the conditions under which these agreements are most effective and the degree to which these agreements legitimately achieve positive outcomes.

From a pragmatic perspective, it is important to find the most effective time to negotiate supraregulatory agreements within the project planning phases and the most effective degree of integration into existing legal and policy regimes. According to many aboriginal respondents interviewed, supraregulatory agreements would function most effectively if they were signed before project approval. At the same time, it has been argued that these agreements should be linked to EA findings, presuming that IBAs would be most effective if they were signed after an EA is complete (Klein et al., 2004). This debate raises the following question: What is the most effective timing schedule for these agreements? Also, the degree to which supraregulatory agreements may be integrated in existing legal and policy regimes is uncertain given the confidential nature of IBAs and some Socio-Economic Agreements. Analysts contend (e.g. Kennett, 1999b) that provisions in some IBAs may limit the degree to which signatories are allowed to intervene in the EA process, undermining the participation objectives of EA. The potential conflict that supraregulatory agreements pose to the public process may be such that these agreements would be more effective if they were integrated into a legal or policy framework. This contention raises another question: What is the relationship between the EA participation process and the negotiation process of supraregulatory agreements?

While it has been stated that positive outcomes associated with these voluntary measures do appear in the Mackenzie Valley, supraregulatory agreements also have the potential to fail in legitimately achieving these outcomes. Like other voluntary governance measures, the degree to which supraregulatory agreements are short lived, conflict with state-led governance methods like EA, and function to benefit shareholder interests rather than benefit local stakeholders have significant repercussions for sustainable development and environmental justice. In the Mackenzie Valley, the failure of supraregulatory agreements may create an unnoticed governance gap in environmental and social impacts and benefits associated with mining. This possibility begs even more questions: What is best institutional framework for achieving our environmental goals? If sustainability and environmental justice are reasonable goals, is the mixed state-led and non-state governance regime in the

Mackenzie Valley sufficient? Or, are voluntary measures like supraregulatory agreements likely to fail when a firm's shareholders no longer benefit from this arrangement? Formally answering these questions represents one important step in achieving less harmful or possibly even sustainable outcomes for mining projects in the future.

7 **BIBLIOGRAPHY**

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APPENDIX A: CASE TIMELINES

Ekati Diamond Mining Project

1989	Diamonds discovered in NWT, spurred on largest staking rush in North American history
1992	(Winter)BHP begins winter drilling program
1995	(July)BHP submits IES to EARP panel
1996	(October)IBA signed with Dogrib Treaty 11
1996	(October)Socio-economic agreement signed with GNWT
1996	(November)IBA signed with Yellowknives Dene First Nation
1996	(November)IBA signed with Łutsel K'e Dene First Nation
1997	(January).Project Approved: Water License, Land Leases, Fisheries Authorization issued
1997	(January)Environmental Agreement signed
1997	(May) First meeting of the Independent Environmental Monitoring Agency
1998	(July 14) IBA signed with North Slave Métis Alliance
1998	(October 14)Ekati opens
1998	(December 9)IBA signed with Inuit of Kugluktuk and Kitikmeot Inuit Association

BHP-Billiton Expansion Project

1999	(April)Northwes	t Territories Water	Board refers	s project to N	4VEIRB
2002	(August)	. Project Approved:	MVLWB	issues Water	License

Diavik Diamond Mining Project

2000	(March)	Environmental Agreement signed
2000	(March)	Participation Agreement (PA) signed with North Slave Métis Alliance
2000	(April)	PA signed with Dogrib Treaty 11 Council
2000	(June)	CARC and Diavik settle out of court ²⁰
2000	(October)	PA signed with Yellowknives Dene First Nation
2000	(November)	Project approved: MVLWB issues Water Licence
2001	(September)	PA signed with Łutsel K'e Dene Band
2003	(July)	First rough diamonds up for sale

Snap Lake Diamond Mining Project

2002 (December)......Lutsel K'e signs Memorandum of Understanding to negotiate an IBA

²⁰ Canadian Arctic Resources Committee (CARC) challenged comprehensive EA process. In particular, CARC was upset with the lack of rigorous public consultation and cumulative effects assessment. CARC intended to use the settlement money to fund independent study evaluating regional cumulative effects in the NWT. One such study can be found at www.carc.org/2005/mapping_cumulative.php.

2003	(February)	Project IS	SO 14001 registration complete
2003	(July)	MVEIRB submit	s recommendations to Minister
2003	(October)	Recomme	endations approved by Minister
2004	(January)	News release indicates proponer	nt is currently negotiating IBAs
2003	(May)	Soci	o-Economic Agreement signed
2003	(May)	Envir	onmental Agreement approved
2004	(June)	Project Approved:	MVLWB issues Water License
2005	(January)		IBA negotiations ongoing
2005	(Spring) First pha	ase of construction begins in antici	pation for construction in 2005

APPENDIX B: LIST OF SIGNATORIES TO *SUPRA*REGULATORY AGREEMENTS

Project	Proponent(s)	IBA Signatories	Socio-Economic Agreement	Environmental Agreement
			Signatories	Signatories
Ekati Diamond Mine	 BHP-Billiton Blackwater Group 	 Dogrib Treaty 11 Inuit of Kugluktuk and Kitikmeot Inuit Association Łutsel K'e Dene First Nation North Slave Métis Alliance Yellowknives Dene First Nation 	 Government of NWT 	 Government of Canada Government of NWT
Diavik Diamond Mine	 Diavik Diamond Mines Inc. (Aber Diamonds and Rio Tinto plc) 	 Dogrib Treaty 11 Łutsel K'e Dene First Nation North Slave Métis Alliance Yellowknives Dene First Nation 	 Government of NWT Aboriginal Signatories 	 Government of Canada Government of NWT Dogrib Treaty 11 Kitikmeot Inuit Association Łutsel K'e Dene Band North Slave Métis Alliance Yellowknives Dene First Nation
Snap Lake Diamond Mine	● De Beers Canada	 Dogrib Treaty 11 Łutsel K'e Dene First Nation North Slave Métis Alliance Yellowknives Dene First Nation 	 Government of NWT Potential aboriginal signatories (some have chosen not to sign) 	 Government of Canada Government of NWT Dogrib Treaty 11 Council Łutsel K'e Dene Band Yellowknives Dene First Nation North Slave Métis Nation (some aboriginal groups have not yet signed)

APPENDIX C: EXCERPTS FROM DOCUMENT REVIEW SUMMARIES AND ANALYSIS TABLES

Example of a Summary Document devised during document review: document name refers to Folder/Binder number and each summary refers to a primary document that is numbered in the archive. The following summary document refers to Binder 16 and summarizes to the primary documents (i.e. #625 to #643) in that folder.

March 27, 2004: Snap Lake Binder 16, Documents #625-#643

Technical review of EAR and subsequent information submitted by De Beers Canada Mining Inc. (DCMI) (Feb 14, 2003) #643 from INAC's David Livingstone:

As an expert advisor, that manages the waters of the NWT, it advises on water-related manners: Predictions of mine water quality

Mgmt of paste kimberlite and waste rock in the North Pile

Impacts of wastewater discharges to Snap Lake

Abandonment and Restoration

Cumulative impact assessment on aquatic resources

Review based on information received prior to January 31, 2003 – there has been substantial submissions by DCMI since then, but INAC was unable to review it on such short notice – with only this information, they feel that the "uncertainties associated with these unresolved issues" makes them conclude the "impacts on aquatic organisms are substantially underestimated".

Conclusion, "INAC considers the EA to be incomplete and, as such, does not provide an adequate basis for assessing the impacts of the proposed project"

[Examples of some criticisms: INAC's criticisms of the procedure used by DCMI: use of benchmark standards (used EPA standards instead of CCME standards developed in Canada) allowed for predictions of lesser impacts, "the nature, severity, and aerial extent of impacts on fish and/or other aquatic organisms could have been different than those presented in the EA report and that such impacts were likely underestimated"

Terms of Reference (ToR) required DCMI <u>not</u> to conclude on significance, but they did comment on impacts as "negligible, minor, moderate, or major" based on their significance. So, INAC recommends that alternate IA criteria be established to consider potential effects (e.g. chronic toxicity thresholds to determine significance of effect on sensitive aquatic organisms like zooplankton, where exceedance of the CTT in < 1% of Snap Lake is Negligible to exceedance of CTT > 20% of Snap Lake is high impact).] Review also from INAC's Land Administration Division that controls and manages Crown Lands, and mine will be wholly located on these lands – they seem to be more satisfied with the EAR than David Livingstone's department

NSMA submitted 2 technical reviews (with Stantec as their consultants – experts in biophysical impacts - and a social science PhD researcher from UBC who is an expert in social, cultural, economic impacts). Stantec's summary is as follows #642:

Highlight fisheries (inadequate address of algae on food web and monitoring as required by ToR, and consultation for participation in monitoring), hydrogeology (limited data on groundwater flow regime), wildlife (general disconnection between baseline and questions asked in ToR), TK (not all available TK used to help make predictions), monitoring (no monitoring program exists at this time), cumulative effects (not clear if adequately assessed), cultural impacts (consultation incomplete – "In absence of information on traditional resource use and the resource base, the <u>communities are at a serious</u> disadvantage when entering in any IBA negotiations that require information on lost harvesting

opportunities (ToR lines 233, 438-455; MVRMA S. 115)")

Dogrib Treaty 11 Technical Review by Entrix, YDFN's Land and Environment Committee (chair: Rachel Crapeau):

Avoid faults of previous mines: Ekati accidentally introduced non-native vegetation into the revegetation plots

No cumulative social impacts assessed on immigration of new workers and their families from the South and elsewhere in the NWT

<u>TK:</u> suggest for incorporation into TK studies, esp caribou hunters and fishers to monitor health of species

Many FN groups not comfortable with excavation methods in esker due to potential effects on wildlife that uses the esker (caribou migration and bear/wolf denning – want to visit site to provide suggestions Criticisms of the process: Five days for public hearing not enough – need more time to properly address all concerns; No reasons why Board has rejected some of their IRs – according to YDFN

Committee's mandate: to review all proposed developments that have potential for producing negative impacts to the land, waterbodies, and natural resources on Akaitcho Treaty 8. Technical advisor Tim Byers.

Letter from Gordon Wray (alternate chairman – MVEIRB) outlining reason for decision to refuse IRs #637

"The Rules make it clear that all IRs are issued by the Review Board and that the decision to authorize the issuance of any IR question is <u>discretionary</u>". Reasons given are as follows:

Must be relevant (s.128 MVRMA)

Must not be frivolous, vexatious, argumentative or prejudicial

IRs that require new field studies will generally not be approved b/c testing EAR can be done without new field studies, and if EAR is deficient then it is up to the Board to consider this during proceeding Usually reject IRs that will be more properly addressed in regulatory proceedings No obligation to accept IRs received after deadlines

Email inventory of technical submissions received by Board since Jan 2003:

Total of 24 submissions from De Beers <u>– technical memos received after Feb 14th/21st deadline for reviewers – not very useful for reviewers – did respond to many of INAC's concerns and FN organizations concerns (consultation update)</u>

9 technical meeting notes with regulators

8 parties' technical reports: YDFN, NSMA, Dogrib Treaty 11, GNWT, INAC, DFO, NRCan, EC

Submission to registry re: De Beers Canada Fund for \$3.7 Million a year toward socio-economic and educational initiatives – outlines structure of operations and other details. Technical memo: Overview of Project Milestones and Monitoring and Management Programs #626 from Robin to the Board, 28 Feb, 2003:

Plan to complete negotiations for SE Agreements by June 3, 2003

Plan to finalize IBAs by June 3, 2003

Plan to complete negotiations for Environmental Agreement by Jan 31, 2003

Some commitments (esp. incorporation of community participation) is off-loaded to the E-Agreement, as is all of socio-economic monitoring to Socio-Economic Agreement

Excerpt from Document Analysis Table: One row from much larger table used to analyse Snap Lake Diamond Project MVEIRB EA Archives. Table categorizes concepts from documents that fit the normative criteria "Partnership". Concepts organized by Weeks and Folder/Binder number (F), which corresponds to a Summary Document.

Week One	Week Two	Week Three
Folder (F) 6, Information	F 12, Technical sessions allow for aboriginal TK	F 22, Over 142
requests: Gartner Lee Ltd.,	holders to inform process: Elders contribute to	community
regulatory experts, and experts	discussion, asking questions and highlighting	meetings and
hired by First Nation (FN)	what is important to them, while translators	interviews: From
organizations all given equal	(headsets for everyone) available to everyone.	2000 to 2003 with
weight. More attention is paid to	Sessions over 10 days with 70 tapes recorded	communities and
those that put in more	verbatim [FN concerns allowed to bring up issues	other
Information Requests (IRs)	as openly as "experts" from regulators and	organizations [Lots
(appears that organizations with	proponent in technical sessions. But, "experts"	of consultation
greater capacity is given greater	(e.g. lawyers and consultants) representing FN	took place, little
power in informing the process).	organizations participated more than "non-	indication to the
Thus, Łutsel K'e (who	experts"]. F 15, NSMA interests highlighted but	quality of
complained of lack of capacity)	not responded to: No mention of impacts on	consultation in this
could not submit an IR to the	native language, Michif, in EAR. Regulators did	document].
extent that Government of the	not bring this up in their IRs. Appears to reflect	
NWT (GNWT) could [equal	power dynamics among FN groups in NWT [lack	
weight given, but more response	of regard for issue of impact on language that is	
to organization that could submit	not Chipewyen or Dogrib - more dominant native	
more IRs – greater capacity	languages]. F 16, FN hire "experts" to review	
means greater influence in	documents: While so many "experts" are hired by	
process. But mandate of many	government, proponent, and the Board, FN also	
organizations is to work on	hire them (why?) but FN interests served, "In	
behalf of FN/northern citizen	absence of information on traditional resource use	
interest].	and the resource base, the communities are at a	
	serious disadvantage when entering in any IBA	
	negotiations that require information on lost	
	harvesting opportunities (Terms of Reference	
	lines 233, 438-455; MVRMA S. 115)". [FN hire	
	"experts" drains capacity and leads to	
	duplication].	

Excerpt from Interview Analysis Table: One row in much larger table used to analyse interview findings. Each cell contains a direct quotation from a transcript that corresponds to a broad concept. This row corresponds to the question, "What is the rationale for IBAs?" and the broad answer "Benefits". Each cell refers to the original transcript number.

1	2	3	4	5	6	9	13	16
benefits from the mines to go to our communit y	Benefit s for being present there	was royalties , jobs, training, social issues	increased economic opportunities , increased development opportunities for First Nations	comes down to training , hires	ensure the communitie s received the maximum benefits from the proponent	It is the way of doing busines s in the north now	and have an opportunit y to go out on the land and bring traditional food back	economic benefits. And for the employmen t part of it too

Large excerpt from Summary Analysis Table used to analyse findings from document review and interviews: Devised from Interview Analysis Table and Document Analysis Table. This table was used to devise Tables 4.1 and 5.1. Organized according to interview questions.

Interview Question	Broad concept referring to interview responses	
MVEIRB	TK in decision-making	·
Meets ideal	Non-expert folks, great understanding of local environment Broad objectives (social, cultural, economic, address gov't)	
	Cumulative Effects Assessment	
	Fair, open, objective, transparent, and participatory	
	Broad Recommendations	
MVEIRB Not most ideal	Lack of Board Member training	EA Deficiency (See Table 4.1) <i>No Benefits</i>
not meet ideal	Expert-oriented (conflict with and too much focus on)	Trust?
	Bigid formal uncomfortable environment for bearings	Trust?
Barriers to ideal	Capacity (financial, human resources, and knowledge)	Capacity
	Lack of trust in government	Trust
	Lack of trust in Board	Trust
	Lack of adequate consultation	Trust
	Decisions and enforcement rests with Minister(s)	Follow-up
	Lack of follow-up and integration to regulatory	Follow-up
	Lack of tools to assess social and cultural impacts	Capacity
	Political bias and momentum to develop	Trust
IBA	Nothing better offered	Agreement Rationale (See Table 5.1)
(Rationale/Goal)	Social-cultural-economic permit	Follow-up
	Political leverage	Capacity
	Redistribute fiscal benefits	Benefits
	Sustainable development	Follow-up
	Benefits	Benefits
	Compensation	Benefits
	Royalties	Benefits
Environmental	Watch-dog agency	Trust
Agreements	Monitoring	Follow-up
(Goal/Rationale)	Trust in independence	Trust
	Lack of government capacity	Capacity
	Lack of regulatory instruments	Follow-up
	Consolidate security	Follow-up
	Adaptive management	Follow-up
Socio-Economic	An IBA equivalent for Non-Aboriginal social issues	Benefits
Agreements	Aboriginal involvement in project	Trust
(Goal/Rationale)	Redistribute fiscal benefits	Benefits

APPENDIX D: LIST OF KEY INFORMANTS

The following list includes key informants who were interviewed in-depth and key informants who were not interviewed, but provided valuable knowledge through conversation. Their job title in spring/summer 2004 is below. The "*" indicates a key informant who participated in an in-depth interview.

Louie Azzolini*	
Don Balsillie	Former Chief of Deninu K'ue First Nation
Ted Blondin	Land Claims Manager, Dogrib Treaty 11 Council
Todd Burlingham*	
Tim Byers	Chair, Independent Environmental Monitoring Agency
Archie Catholique*	Chief of Łutsel K'e Dene First Nation
Vern Christensen*	Executive Director, MVEIRB
John Donihee*	Legal Counsel, MVEIRB
Doris Eggers*	Director of Policy, Legislation and Communication, RWED, GNWT
Alan Ehrlich*	Senior EA Officer, MVEIRB
Rick Hoos	
Lisa Hurley*	
Kris Johnson*	Land and Resources Coordinator, North Slave Métis Alliance
Martin Haefele	EA Officer, MVEIRB
Heidi Klein*	
David Livingstone*	
Gabrielle Mackenzie-Scott	*
Jane McMullen*	
Carol Mills	
Gavin More*	
Adrian Paradis	
Bertha Pahesca	

John Stevenson*	Board Member, MVEIRB
Mary Tapsell*	Acting Director, Environment Canada
Shirley Tseta*	IBA Implementation, Yellowknives Dene First Nation
Bob Turner* Manager, Communit	y Relations and Logistics, Northern Gas Project Secretariat
Shannon Ward	
Eric Yaxley	

APPENDIX E: SAMPLE INTERVIEW SCHEDULE

The following is a sample of the interview schedules that were applied to various key informants. These schedules were used as a guideline only.

A: Introduction (<10 minutes)

- Begin with a brief introduction and a review of the research purpose as per preliminary letter:
- MA student, Department of Geography, Simon Fraser University
- Research concerns the reasons for the rise of novel forms of environmental governance, especially Impact and Benefit Agreements among First Nation stakeholders for the NWT's diamond mines
- As an icebreaker, suggest coffee, lunch, or a tour of the office(s).
- Assure confidentiality and an opportunity to review the transcripts and make any changes to them. Use consent form if necessary (see consent form below). Ask permission to use tape recorder.

B: Respondent Background Information, if necessary (< 10 minutes)

- Verify background research of respondent
- Position title
- Role in organization
- Relevant experience outside of this position
- Role in case studies (i.e. Ekati, Diavik, and Snap Lake projects)

C: Substantive questions (30-50 minutes)

- Designed for informants knowledgeable in the MVEIRB EA process (e.g. Government Representatives, Board Members, Staff Members, Independent Expert):
- How would you define an ideal form of EA? Please try to keep response brief and specific. [Prompt, if necessary suggesting ideal criteria²¹.]
- In your view, what aspect(s) of the MVEIRB EA process do not achieve the ideal process characteristics you described in question one? [Prompt, if necessary: In particular, how does the MVIERB EA process not succeed in meeting ______ (highlight answer from question one)?]
- In your view, what are the biggest challenges or barriers to achieving an ideal environmental assessment process in the Mackenzie Valley?

²¹ Ideal criteria displayed in Table 2.2.

Designed for informants knowledgeable in Socio-Economic or Environmental Agreements (e.g. Government Representatives, Aboriginal Representatives, Independent Expert):

- In your view, what is the rationale for _____ [insert "using" for government representative or "sitting at the negotiations table for" for aboriginal representative] Environmental Agreements?
- In your view, what are the goals for _____ [insert "using" for government representative or "sitting at the negotiations table for" for aboriginal representative] Environmental Agreements?
- In your view, what is the rationale for _____ [insert "using" for government representative or "sitting at the negotiations table for" for aboriginal representative] Socio-Economic Agreements?
- In your view, what are the goals for _____ [insert "using" for government representative or "sitting at the negotiations table for" for aboriginal representative] Socio-Economic Agreements?

Designed for informants knowledgeable in Impact and Benefits Agreements (e.g. Aboriginal Representatives, Independent Expert):

- In your view, why does _____ [insert appropriate aboriginal group name] choose to negotiate Impact and Benefit Agreements with diamond mining companies? [Assure respondent, if necessary: I am not interested in the nature of IBAs. I do understand that they are confidential and I do not expect you to disclose this information.]
- In your view, what are the intended goals _____ [insert appropriate aboriginal group name] wish to gain by using this type of agreement? [Prompt respondent, if necessary: Some analysts argue that IBAs are a function of _____ (insert random EA limitation²²). Do you agree or disagree?]

D: Conclude Interview

- Thank you for your time. I have three final questions for you.
- Could you recommend any documents or articles that I should read?
- Could you recommend any other potential key informants that you think would be particularly useful to this research?
- Would I be able to send you an email if I think of something else?
- I truly appreciate the knowledge you have provided me for my research. Again, feel free to contact Dr. Bradshaw or myself if you have any concerns or questions.

²² EA limitations presented in Table 2.1.

APPENDIX F: PARTICIPANT CONFIDENTIALITY AND SCIENTIFIC RESEARCH LICENCE

Preliminary Letter and Assurance of Participant Confidentiality. The following form was used to obtain informed consent from participants while assuring their confidentiality:

My name is Lindsay Galbraith and I am from Simon Fraser University in the Department of Geography. I am conducting research on the rise of Impact and Benefit Agreements (IBAs) under the supervision of Dr. Benjamin Bradshaw. It has been considered that the rise of IBAs is partly caused by the dissatisfaction of the Environmental Assessment process. You are in a unique position to describe the process and its effects on local residents and organizations. If you agree to participate, it would involve an interview that would take about 40 minutes of your time. There are no risks associated with the study. You are under no requirement to participate in this study and should feel free to decline. Even if you decide to participate, you may withdraw from the study at any time. You will not be penalized for not participating or for withdrawing. Nothing you say will ever be identified with you personally. Your participation and all information will be kept confidential. The interview transcripts and audiotapes (if applicable) will be destroyed at the end of the study to ensure the confidentiality of your responses. The interview transcription will be mailed to you, so you have the opportunity to review them and make any changes to them. If you are interested in the results of the study, feel free to contact myself, or my supervisor, Dr. Bradshaw. The Aurora Institute will also be provided with a public record of this research. I welcome any questions, comments, and suggestions before and after the interview.

Consent Form (will be used as participant prefers)

I agree to take part in this study, which has been explained to me. I have been given an opportunity to ask questions about the study. I understand that any questions I answer will be anonymous, and that my identity will not be disclosed at any point. I also understand that my participation is completely voluntary, and I may withdraw from the study at any time.

Signature of participant

Date

	Licence # 13632N
	File # 12 410 619
ISSUED BY:	Aurora Research Institute - Aurora College Inuvik, Northwest Territories
ISSUED TO:	Ms Lindsay Galbraith 5357 Fleming Street Vancouver, BC V5P 3E8 Tel: (604) 324-4182
ON:	20-May-04
TEAM MEMBERS:	N/A
AFFILIATION:	Simon Fraser University
	Simon Fraser University Parks Research Grant
FUNDING: TITLE: Understar OBJECTIVES OF RI This research is conce Canada's hinterlands, seeks to understand th Benefit Agreements (ading the Need for Novel Forms of Environmental Governance ESEARCH: erned with increasingly fractious relations between mining firms and local communities in and the systems of governance that aim to mediate these relations. More specifically, this resear he rationale of indigenous communities in the Northwest Territories for establishing Impact and IBAs) with a number of diamond mine developers north of Yellowknife. This research will
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Scientific Research Licence. The Aurora Research Institute issued the following licence to the researcher:

APPENDIX G: MINING REGULATIONS IN THE MACKENZIE VALLEY, NWT

The following table describes the regulations usually applied for mining developments in the Mackenzie Valley, NWT, by identifying the responsible agency that issues authorization, the name of the authorization and its legislation, and a description of the authorization.

lssuer	Authorization name, guiding legislation	Description of Authorization
INAC (Lead RA)	Surface Land lease, Territorial Lands Act and Territorial Lands Regulations	30 Year lease Subject to termination if other leases terminate Rent and security deposit required Usually more than one lease required Issues considered: Waste disposal Environmental (i.e. erosion, land spill, "environmental change") Fuel and hazardous chemicals
Mackenzie Valley Land and Water Board (if project proposed lies outside of Sahtu and Gwich'in jurisdictions). Decisions of the MVLWB are final and binding, but subject to Minister approval (s.18).	Class A Water Licence, s.60 of MVRMA indicates the MVLWB compliance with <i>NWT</i> <i>Waters Act</i> , except for the following subsections of that Act: s.10 to 13, s.14(6), s.20, s.22, s.23(1)(<i>b</i>),(2)(<i>b</i>), s.24, s.27, s.28, and s.37(2). S.31(1) does not apply to FN lands. <i>Northwest</i> <i>Territories Waters Regulations</i> apply to the MVRMA.	5 year renewable Large security deposit Comprehensive Issues considered: Quantity of water use Restoration Measures taken to protect fish habitat, fish, spills Dewatering conditions Waste management conditions and thresholds Provides <i>Surveillance Network Program</i>
Natural Resources Canada	Explosives Act Permit, Factory Licence for Explosives, Explosives Act	Outlines conditions in which to operate explosives (thresholds, etc).
Department of Fisheries and Oceans	Navigable Waters Protection Act Permit for Dike approval, Navigable Waters Protection Act	Outlines conditions in which dike can be constructed.
Department of Fisheries and Oceans	Authorization for Destruction of Fish by Any Means Other Than Fishing, <i>Fisheries Act</i> (s. 32)	Outlines conditions of operations and requirements for compensation of lost or altered habitat.

APPENDIX H: COPYRIGHT NOTICE

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