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Measuring Policy Effectiveness: First Nations' Participation in Environmental Assessment in Northern British Columbia, Canada

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Introduction

Although mining has had significant impacts on First Nations' communities and traditional territories, indigenous people have participated marginally in environmental assessments of mine developments in British Columbia. Nonetheless, aboriginal rights have expanded within Canadian Courts, where presently, new case law fosters the potential for First Nations to be able to lay claim to title of traditional territories and resources. As a result, the British Columbia government is now, more than ever, recognizing the need to avoid infringement on aboriginal property rights during resource development and the importance of finalizing land claim settlements. In response to these needs, the environmental assessment process in British Columbia has evolved to increasingly include First Nations' participation in resource developments that affect their traditional territories. The environmental assessment process "ideally" provides an avenue for First Nations' participation, and an opportunity to affect mining or any large-scale resource development. However, Traditional Owners are often torn between land claim settlements and decision-making processes such as environmental assessment that could affect their settlement, and as a result, often do not participate in the process. Yet, the decision-making process involving First Nations people does not differ with respect to land claims and the present decision-making process involving resource distribution. Access to resources and the opportunity to participate in the decision-making remain obstacles to negotiating self-government. This paper examines the effectiveness of British Columbia's environmental assessment policies for First Nations' participation in mine development in northern British Columbia and the effectiveness of recent changes in environmental assessment legislation that attempts to improve the participation of First Nations in the process. Three case studies will be reviewed to evaluate how First Nations were integrated into the decision making process within the environmental assessment framework. Effectiveness provides a suitable criterion to evaluate the participation of First Nations' people because it allows the evaluation of a range of policies (that have changed over the last decade) in terms of their intentions, how the policy(ies) was actually carried out, and the impact of First Nations on the decision-making process. The case studies provide a review of three mine developments in North Eastern British Columbia over the last 10 years. The case studies are evaluated in terms of procedural, substantive, and transactive policy effectiveness using Sadler's 1996 criteria. This paper will also suggest that consideration of the concept of effectiveness on a cross cultural basis between indigenous populations and resource companies may also be a useful starting point for successful consultation and involvement.

Background

Even though there has been continual conflict across Canada between First Nations and mining corporations, mine development in British Columbia has not, until recently,

been affected with the introduction of the *Canadian Environmental Assessment Act (1995)*, and the *British Columbia Environmental Assessment Act (1995)*. This is due to the economic importance of mining. The mining industry is a powerful economic force that contributes approximately three and a half billion dollars to British Columbia's exports and provides high industrial wages for thirteen thousand British Columbia employees (Ministry of Energy, Mines and Petroleum Resources, 1995).

The fact that the mining industry is important in British Columbia does not diminish its responsibility to ensure that mine development occurs in a manner that is environmentally, economically, and socially sound. In recognition of this, the government of British Columbia enacted the *Environmental Assessment Act, (EAA)* on June 30, 1995. This act attempts to provide an environmental process for developments such as those pursued by mining companies. However, a review of the EAA found that the process needs to address the issue of First Nations' participation in the environmental assessment process (Sadler, 1997).

The issue of First Nations' participation in a range of different developments in the EAA was identified during a series of information sharing and advisory sessions held throughout British Columbia with varied First Nations' groups in 1996 and 1997. Within these meetings First Nations expressed many concerns with the EAA process. The first concern deals with notification. First Nations' principal concern in this area is the need for early notice of an application for a project approval certificate prior to any sod turning.

The second concern involves the assessment of project effects. First Nations expressed the view that past history with development projects has demonstrated a lack of impact assessment for economic, environmental, social, heritage, cultural, and health effects. The view was also expressed that past developments have failed to share resulting project benefits, such as economic, educational, and employment opportunities with neighboring First Nations' communities.

The third area of concern expressed by First Nations was that consultation should provide an open process. First Nations felt that their concerns regarding certain issues must be treated with respect even if they are different to concerns held by people outside their communities. First Nations also expressed opinions regarding the manner in which consultation should take place; and a need for two-way communication; sufficient time to discuss the issues within their communities; and a choice of what consultation method will be used in the process. In summary, the expression of concerns by First Nations groups creates the perception that there is a lack of First Nations' participation within British Columbia's EAA and raises the question of the current policy effectiveness for First Nations' participation within the process.

This perceived lack of First Nations' participation in the environmental assessment process in British Columbia appears to be a contributing factor in the conflict that exists between them and mine developers. For example, there has been conflict at the Kemess and Huckleberry mines, located in northwestern B.C. The developers of the

Kemess mine were accused by the Tsay Keh Dene band of destroying or impairing their rights and practices in relation to their traditional territory and of providing inadequate compensation for these damages. The company response to the Tsay Keh Dene allegations was that, because the company had received their project certificate after a four-year process that included consultation with all parties and stakeholders (including the Tsay Keh Dene), all issues had been addressed. In response, the Tsay Keh Dene attempted to halt the mine development project by taking their fight to the province's Supreme Court. Through mediation between the Province and the Tsay Keh Dene, the Band discontinued its current litigation as an out of court settlement was achieved.

Conflict between the Cheslatta band and the Huckleberry mine developer occurred when the Cheslatta band accused the government of failing to follow its own environmental assessment process when it approved the Huckleberry mine (anon, 1997). As a result, the Sierra Legal Defense Fund, representing several First Nations groups, challenged the Huckleberry mine development approval in BC Supreme Court (Schreiner, 1997). In the end, the challenge failed to have the project approval certificate and various decisions made by representatives of the BC government and the Environmental Assessment Office set aside (anon, 1998).

Criticism of mine developments from First Nations is not only limited to British Columbia but is present in other areas of Canada and to indigenous populations worldwide. For example, the approval of the BHP diamond mine in the Northwest Territories has resulted in criticism of environmental assessment as failing to provide a comprehensive, fair, and rigorous process (O'Reilly, 1996; Wismer, 1996). First Nations involved with the process are calling for the direct involvement of their communities in environmental plans. First Nations bands involved with the Diamonds' environmental assessment stated "we have to be involved in developing it, reviewing it, and approving it" (Diamond Panel, 1996).

First Nations' lack of sufficient involvement in mine development has also been recognized by government and industry. For example, the government of British Columbia in 1997 rejected the proposal for a mine development in the Windy Craggy area because insufficient consultation, in their opinion, had occurred with First Nations (Hauka, 1997). As well, Placer Dome's chief executive officer, John Willson, agreed that First Nations are not consulted as well as they should be by mine developers (Natives, Miners, 1997).

In many quarters the continued conflict between First Nations and mine developers in British Columbia is considered serious enough to be a threat to the viability of the mining industry. A 1998 survey of mining companies found that 92% of respondents cited aboriginal issues as the industry's main concern (Cunningham, 1998). Considering the economic importance of mine development in British Columbia and the wide spread perception that First Nations' participation in the EAA for mine development is lacking, the need for research to evaluate the policy for First Nations'

participation in the environmental assessment process for mine development is apparent.

Evaluating the Effectiveness of First Nations' Participation

Effectiveness, within the realm of EA is defined as "how well something works or whether it works as intended and meets the purposes for which it is designed" (Sadler, 1996, 37). To measure EA effectiveness there are three criteria that can be used: procedural, substantive, and transactive (Marsden, 1998; Sadler, 1996). To be effective *procedurally* means to meet accepted principles and provisions, whereas to be effective *substantively* is the achievement of established purposes and objectives (Sadler and Verheem, 1996). To measure effectiveness *transactively* is to determine the extent to which the procedural principles deliver the substantive objectives at the least cost and in the minimum time possible (Sadler, 1996).

For example, how an EA participation policy works from a *procedural* aspect is the extent to which it meets accepted principles such as public notification of meetings, provision of access to information, and use of appropriate consultation techniques. If it conforms to these accepted principles the policy works procedurally. From a *substantive* aspect, how the EA participation policy works is the extent to which it meets established objectives such as representation of the public, public education, and resource provision. If it fails to attain these established objectives the policy does not work substantively.

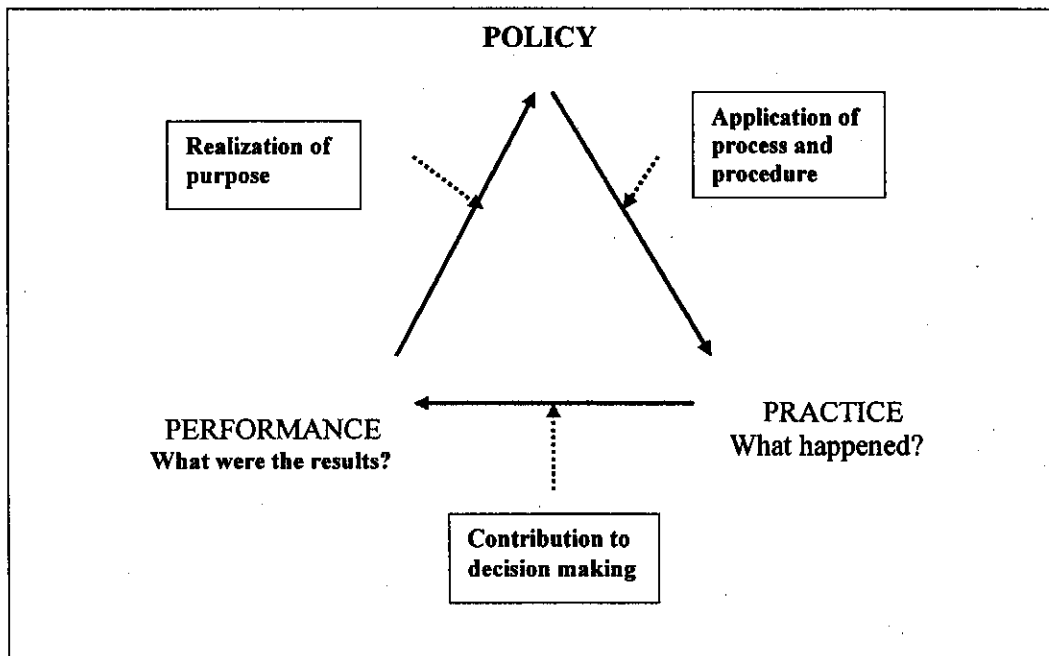
Finally, we can say that: If the way in which an EA public participation policy is applied (i.e. public notification of meetings one week in advance, access to information at local libraries, and use of specific consultation techniques) delivers the objectives (i.e. representation of the public was attained, public education on the issues and the process occurred, and the public had access to resources) in a manner that is not wasteful of resources such as time and money, then the policy works *transactively*.

These aspects (procedural, substantive, and transactive) of EA effectiveness can be measured by the application of an "Effectiveness Triangle" (Figure 1 from Sadler, 1996). Krawetz et. al. (1987) also use the concept of the "Effectiveness Triangle" in the development of an effectiveness framework for measuring environmental monitoring. They refer to the framework as the "Monitoring Triad", which relates the plan (policy), the process (application), and the objectives (performance) of monitoring to one another in a triangular relationship. Similarly, the "Effectiveness Triangle" illustrates an evaluation cycle for measuring overall effectiveness of an EA policy. It does this by focusing on the relationships between the policy, the application (practice), and the results (performance). As we relate the implications of performance back to the policy, process development and policy adjustments can be made to improve policy effectiveness. This is a similar approach to the application of the Policy Cycle that is used in Australia by Bridgman and Davis (2004). However the primary difference lies in the evaluation criteria applied to determining the *effectiveness* of the policy; Bridgman

and Davis' criteria within the policy cycle are primarily descriptive and do elaborate on the assessment of what effectiveness means.

Sadler's "Effectiveness Triangle" can be used as a basic template for the development of a framework for determining EA policy effectiveness at a component specific level. The focus of this evaluation is component specific in that it seeks to measure the activity of First Nations' participation as a part of British Columbia's EA process for mine development. Each of the components of the effectiveness triangle will be reviewed with respect to First Nations' participation.

Figure 1: The "Effectiveness Triangle" (Sadler, 1996)



Procedural Principles

Basic procedural principles for public participation programs in EA are derived from "Public Consultation Guidelines and Procedures for the Environmental Assessment Report: Key Elements and Options" (Nicholson, 1990), the "International study on EA Effectiveness" (Sadler, 1996) and supporting EA literature that refines these procedures. Borrowing from Nicholson (1990) and Sadler (1996), primary procedural principles, divided into five categories, are established for use in measurement of procedural efficacy. The five categories are composed of:

1. Guiding principles - The process should be open, fair, and objective
 - Consult about how to consult;
 - Inform people about how to become involved. Facilitate participation by provision of funding, personnel, logistical support for technical guidance, legal advice, transport and travelling expenses for participant attendance,

information, and training (Brenneis and M'Gonigle, 1992; Beresford and Croft, 1993; and Smith, 1993);

- Explain how results of consultation will be used in the decision (Parenteau, 1988).

2. Notification

- At least 45 calendar days;
- Through minimum of one newspaper notice; and
- Through methods such as letters to make aware those most likely affected.

3. Access to Information

- Information available, in appropriate regional libraries, that concerns the issues in decision-making process (Lucas, 1977), and that makes the process understandable (Brenneis and M'Gonigle 1992);
- Information should be of immediate relevance, be attractive and brief, and be appropriate to the peoples' abilities, experience, knowledge, language, and culture (Beresford and Croft, 1993); and
- Staff of decision-making process to be responsive to participant information requests (MacLaren, 1995).

4. Consultation Techniques

- Government Department shall hold a minimum of one public meeting or open house;
- Select appropriate consultation technique (public meetings, open houses, site visits, etc.); and
- Seek public input on public preferences for timing, location, and format of consultations.

5. Reporting

- Direct reporting in writing to all participants in consultation, upon announcement of decision on project by minister (Brenneis and M'Gonigle, 1993); and
- Report to include review of consultation process and explanation of how results were or were not incorporated into final decision (Knopp and Caldbeck, 1990).

The extent to which these procedural principles are implemented in a given First Nations' participation process in EA for mine development determines the procedural efficacy for British Columbia's EA policy in that instance.

Substantive Objectives

Substantive efficacy for British Columbia's EA policy for First Nations' participation in mine development is determined by the extent to which the policy achieves the objectives for a participation process in a 'broadened' pluralistic democratic society. The following substantive objectives are borrowed from Laird (1993) and Smith (1984), and supported by the EA literature on public participation programs:

1. Participation Beyond Voting
 - Legislative basis for public participation; and
 - Legal right and opportunity to participate (Lucas, 1977; Brenneis and M'Gonigle, 1992; and Smith, 1993).
2. Representation
 - Public had equal access and opportunity to participate; and
 - Representation entailed a full range of values and interests on a topic (Beresford and Croft, 1993; MacLaren, 1995).
3. Participant Learning and Understanding – of the issues and of the process
 - Public actively participated and was well informed of issues;
 - Public gained new sets of skills, ideas, and values; and
 - Public gained an understanding of the decision-making process (Lucas, 1977; Brenneis and M'Gonigle, 1992; and Beresford and Croft, 1993).
4. Resource Provision
 - Inequalities that existed between participants were balanced by resource provision; and
 - Continuity of participation ensured by resource provision (Brenneis and M'Gonigle, 1992; Beresford and Croft, 1993; and Smith, 1993).
5. Participant influence
 - The limits of public authority in the process are defined;

- Participant preferences are combined in a way that demonstrates how input was considered and used to affect the decision-making process; and
- Written feedback from input into the process is received by the public and demonstrates the reasoning behind decision (Knopp and Caldbeck, 1990; Beresford and Croft, 1993; Parenteau, 1988; MacLaren, 1995; Brenneis and M'Gonigle, 1992).

The extent to which these substantive objectives are achieved by a First Nations' participation process in EA for mine development determines the substantive efficacy for British Columbia's EA policy.

Transactive Criteria

Transactive efficacy for British Columbia's EA policy for First Nations' participation in mine development is determined by the extent to which the policy achieves the following criteria (Sadler, 1996):

1. Time Management
 - Process managed without undue delay or cost to proponents and others
 - Timelines and schedules negotiated up-front
 - Completion of process in accordance with these negotiated timelines and schedules
2. Cost Management
 - Objectives were achieved at least cost as shown by use of the appropriate consultation technique(s)
 - Objectives were achieved at a reasonable cost as estimated by informed judgement

This approach to measuring transactive efficacy is not as developed in the literature as the aspects of procedure and performance, yet it is an important component to overall policy effectiveness.

Case Study Overview

Three case studies in Northern British Columbia were used to evaluate the effectiveness of First Nations' participation in the environmental assessment process. Baker and McLellan (2003) have reported on the use of effectiveness as a means to evaluate policy using these cases. The case studies were selected based on the large scale of the mining developments, the potential impact of the mines on First Nation communities, and on the similar geographic location of the mine sites in Northern British Columbia. Map 1 provides a location of the mine sites. All of the mines are open pit operations mining for

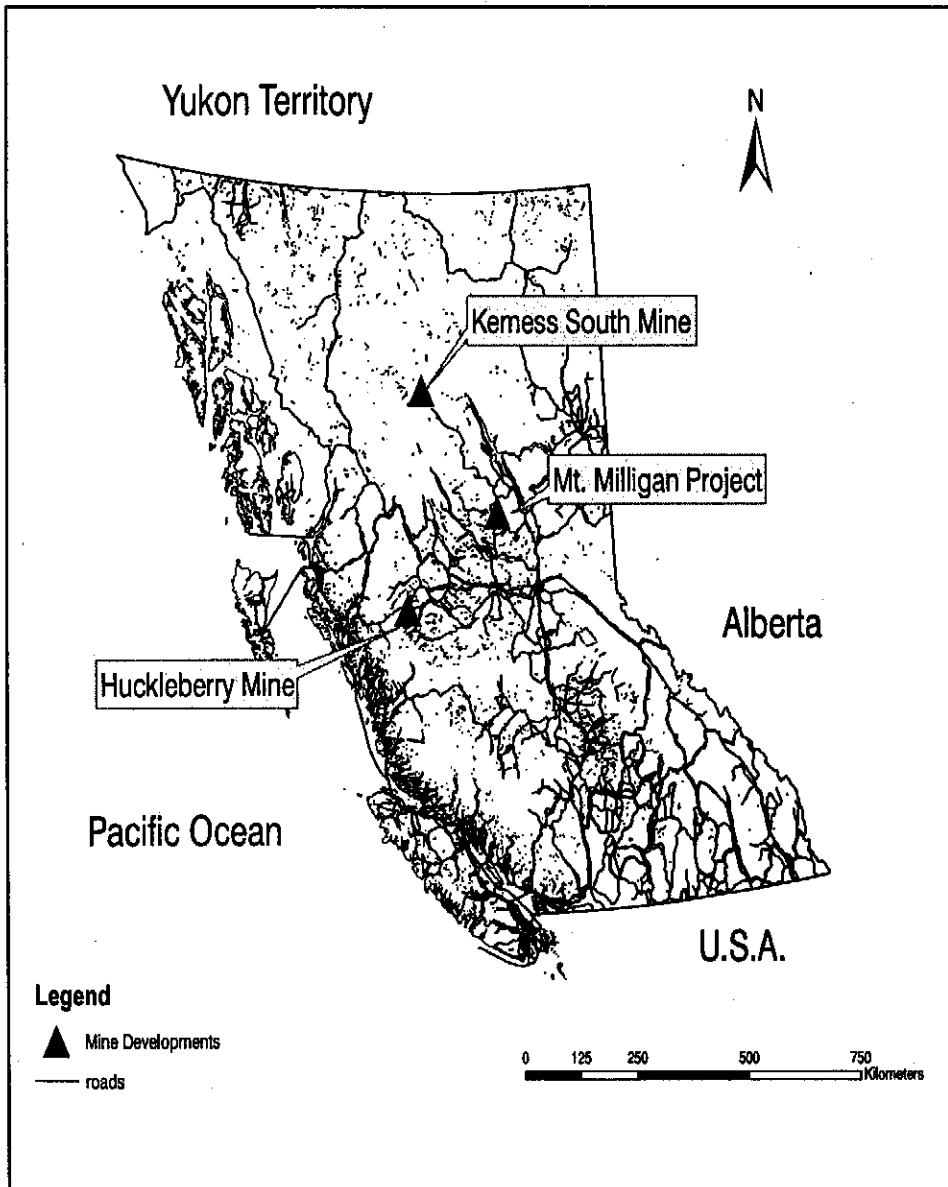
copper/gold concentrations. Each of the case studies is briefly described and the main issues are highlighted.

Mt. Milligan Mine Project

The Mt. Milligan project is situated on Crown land (land owned by the Province of British Columbia) and is located approximately 86km northwest of Prince George and 95km west of Mackenzie in north central British Columbia. The Mt. Milligan project proposal is to design, construct, operate, dismantle, reclaim, and eventually abandon, an open pit copper/gold mine that produces and processes 60,000 tonnes of ore per day. The expected life of this mine is approximately fourteen years. The project would provide 600 jobs for two years during construction and 369 jobs during operation.

The project area in the past has been used by outfitters for guided hunter harvests and is considered to have a high value for trapping and hunting. Both the Nak'azdli and Mcleod Lake bands use the area for hunting, fishing, berry picking, and recreation. The area has a low value for agriculture due to poor soils and a short growing season and it has a moderately low to low value for recreation.

Map 1: Provincial Map Indicating Mine Development Case Studies



Issues of concern raised by First Nation bands during the environmental assessment (EA) process for the Mt. Milligan project included: economic opportunities, uncertainty of acid rock drainage in the future, over-hunting and poaching due to increased access, trap-line compensation, and socio-economic impacts. Resolutions were presented by the proponent and/or Government and were carried forward and included as conditions for approval of a Mine Development Certificate.

On November 3, 1993, the Mt. Milligan project was granted a Mine Development Certificate. The Minister of Energy, Mines, and Petroleum Resources, with the concurrence of the Minister of Environment, Lands, and Parks, determined - based on the full technical review and public and aboriginal consultation programs - that the potential adverse environmental impacts could be managed through existing programs and legislation.

Although Placer Dome Inc. was granted a Mine Development Certificate for the Mt. Milligan project, the company decided in mid 1992 to postpone construction for economic reasons. Upon proclamation of the EAA in 1995 the Mine Development Assessment Committee converted the Mine Development Certificate to a Project Approval Certificate. The project, to date, has not proceeded but its development certificate was renewed on November 3, 1998 and continues to be renewed.

Kemess Mine Project

The Kemess South Project is situated on Crown land and is located approximately 300km northwest of Mackenzie and 370 km west of Fort St. John in the Peace River Regional District. The Kemess South project proposal is to design, construct, operate, dismantle, reclaim, and eventually abandon an open pit copper/gold mine that produces and processes 40,000 tonnes per day of ore, for fifteen years. The project would provide 500 jobs during the two year construction phase and 350 jobs during mine operations.

The project area in the past has been used by outfitters for guided hunter harvests and is considered to have a high value for trapping and hunting. The area has a low value for agriculture, due to climate and poor soils, but has a high value for outdoor recreation and opportunities for stream and lake fishing.

Potential impacts from the Kemess project were identified by the Project Committee and focussed on the following: impacts from the construction of transportation and power options; impacts from the tailings pond and waste rock dump; impacts to fisheries and wildlife from acid rock drainage and water management; archaeological impacts; and impacts concerning First Nations issues. Impacts on First Nations' interests such as hunting, fishing, berry gathering and preserving sacred sites, had to be identified during the EA process so that the project committee could make recommendations concerning compensation, mitigation, or avoidance of those impacts.

First Nations identified as claiming the Kemess South project area as traditional territories are the Carrier Sekani Tribal Council and the Kaska Dene. First Nations which could potentially be impacted include the Takla Lake and the Tsay Key Dene Band of the Carrier Sekani Tribal Council, and to a lesser extent, the Fort Ware, Nak'azdli, and McLeod Lake Bands.

Issues of concern raised by First Nations during the EA process for the Kemess South project included: increased settlement of crown lands resulting from the power-line construction; loss of moose habitat to a section of the power-line corridor; encroachment of hunters and poaching of fish and wildlife as a result of increased access; economic opportunities for contracted work in regards to the Kemess South project development; compensation to trap-line holders; uncertainty about the tailings dam construction; and land claims.

Resolutions to each of these concerns were presented by the government and/or proponent and were accepted by First Nations, except for the issues of the tailings dam construction raised by the Tsay Key Dene, and land claims settlement raised by the Takla Lake and Tsay Key Dene Bands. Concerning land claims settlement, the Tsay Key Dene were opposed to the development unless there was some form of revenue sharing with the Band. The Takla Lake Band expressed the need for compensation for the area of the mine site from the Government, but considered that a package of opportunities for contracts and jobs in addition to trap-line compensation, would satisfy their compensation needs. In response to these requests, commitments were made by the proponent and carried forward as conditions for approval of a Mine Development Certificate.

In March of 1993 the Project Committee concluded that the proponent had addressed the issues raised through the terms of reference of the Mine Development Assessment Process, as well as those arising during the review of the 1994 application and any other issues raised as further information was collected and submitted by the proponent during 1994 and 1995. Although the Tsay Key Dene Band withdrew from the final ethnographic and related studies, the Project Committee felt that the interests of the Tsay Key Dene were considered in the overall review and assessment of First Nations' concerns. Therefore, the Project Committee determined that First Nations and public participation conducted under the *Mine Development Assessment Act 1989* and under the EA process had fulfilled the requirements of the Act. On April 11, 1996 the Kemess South Project received a Mine Development Certificate from the British Columbia Government.

In February of 1997 the Tsay Key Dene Band filed a petition asking the British Columbia Supreme Court to reject the Mine Development Certificate that was issued in April of 1996 for the Kemess South project. The petition claimed that because the project is almost entirely within their traditional territory and the Tsay Key Dene had never ceased to assert their rights and practices in relation to the territory, the mine would destroy or impair the Band's rights and practices without providing compensation for

the damages. The Band wanted the project stopped until such time as their rights could be reviewed and taken into account. The petition also claimed that the environmental assessment review process was influenced by an informal deal between the Province and Royal Oak. The Band claimed that the British Columbia government violated its own provincial environmental assessment laws by fast-tracking the environmental assessment of the Kemess project, without the required public notice, consultation, comprehensive studies, and declaration of conflict of interest.

After two years of trying to get the courts to suspend the Mine Development Certificate the Tsay Key Dene Band and the Provincial government came to an out of court settlement involving a land swap and monetary settlement.

Huckleberry Mine Development

The Huckleberry project is situated on Crown land and is located in west central British Columbia approximately 86 km southwest of Houston. The Huckleberry project proposal is to design, construct, operate, dismantle, reclaim, and eventually abandon a copper mine that employs two open pits. The mine would produce and process 13,500 tonnes per day of ore for a period of eighteen years and the resulting copper concentrate would be trucked to Houston for further transportation to a west coast port for overseas export or eastward to a Canadian smelter. The project would provide 220 jobs during the construction phase, which would last eighteen months, and between 180 and 200 jobs during the life of the mine.

The Huckleberry project area lies within a watershed that feeds the Tahtsa reach of the Nechako Reservoir. Nearby creeks contain no fish species due to their size and variable flows, yet downstream the creeks contain fish species such as rainbow trout, slimy sculpin, red-sided shiner, and long-nose sucker.

The project area has been used in the past by outfitters for guided harvests, primarily of moose and black bear. Records indicate that marten, weasel, and beaver have been the main species trapped in the area. Forestry values are poor due to steep slopes and thin soils and agricultural potential is limited due to a cool climate and poor soils. Recreational use has a moderate potential for activities such as camping, boating, sport fishing, and nature study, while archaeological values are rated low within the project area.

Potential impacts from the Huckleberry project were identified by the Project Committee and focused on the following: impacts from acid rock drainage; impacts to fish habitat; impacts from the construction of a port load-out facility on the west coast; and impacts concerning First Nations' issues. First Nations' interests such as hunting, fishing, berry gathering, and the preservation of sacred sites, were recognized as being potentially impacted from the project and therefore needed to be identified during the EA process.

First Nations identified as claiming the Huckleberry project area as traditional territories were the Cheslatta Carrier Nation, the Office of the Wet'suwet'en Hereditary

Chiefs, and the Nee Tahi Buhn/Skin Tyee (Frog Clan). The Broman Lake Band and the Haisla First Nation were identified in regards to potential secondary and tertiary impacts from the project.

As the Huckleberry project was accepted for project review under the *Environmental Assessment Act*, the Act provided for the establishment of a Project Committee that allowed for representation of provincial government ministries and agencies, federal government representatives, municipal and regional government representatives from the vicinity of the project, and representatives for First Nations Bands identified as being potentially impacted by the project.

On December 13, 1995, the Project Committee approved the Huckleberry project. However, the support for project approval was not unanimous among all committee members. Formal representatives of the Federal, Provincial, and Local government that sat as active members, including the Frog Clan First Nation, supported the conclusions in the Project Committee's report. Other members simply monitored the review and most of these members, including the Haisla First Nation, took no position on project certification. The Office of the Wet'suwet'en Hereditary Chiefs and the Cheslatta Carrier Nation opposed the certification while the Broman Lake Band failed to provide comments. The Cheslatta Carrier Nation indicated that their technical concerns had not been addressed to their satisfaction and also raised concerns with respect to the functioning of the review process itself.

Issues of concern raised by the Cheslatta included:

- Impacts to aboriginal interests such as trapping, hunting, fishing, water quality, animal and fish habitat, berry and medicinal plant picking, and spirituality.
- Environmental issues such as the safety of the tailings impoundment and other structures, impacts of the power corridor, impacts of the port load-out facility, water quality concerns, acid rock drainage impacts, impacts to trap-lines, and impacts to wildlife.
- Issues relating to culture and heritage, including impacts to traditional activities and archaeological values.
- Socio-economic concerns such as the need for training and training assessment, employment opportunities, contracting opportunities, revenue sharing, and mitigation and compensation for losses of traditional food sources.

In response to these concerns the proponent and/or government proposed resolutions which were accepted by some First Nations. However, many of the resolutions were deemed inadequate by the Cheslatta and Wet'suwet'en and led them to take the position of non-support for the project.

Although the proposed resolutions failed to satisfy the concerns of the Cheslatta and Wet'suwet'en, resolutions made by the proponent were carried forward and included as conditions of approval for the Project Approval Certificate. On December 22, 1995, Huckleberry Mines Inc. received a Project Approval Certificate under the

Environmental Assessment Act for the Huckleberry project. The Cheslatta Carrier Nation and the Office of the Wet'suwet'en Hereditary Chiefs opposed the project approval while the Broman Lake Band had concerns regarding the lack of consultation, as well as the proposal to use the road right-of-way which runs through their reserve for the electric transmission line. The Frog Clan supported the project and the Haisla First Nation took no position on the project.

All other members of the Project Committee concluded, based on a full technical and environmental review and public and aboriginal consultation programs, that any adverse environmental impacts that resulted from the project could be managed through existing legislation and through the commitments and requirements identified in the Project Approval Certificate. On December 13, 1995, Huckleberry Mines Inc. accepted the requirements and commitments as stipulated in the Project Approval Certificate.

Although the Huckleberry project received a Project Approval Certificate from the British Columbia government, the Cheslatta Carrier Nation, in opposition to the project, retained the Sierra Legal Defense Fund in preparation for legal proceedings. In March of 1996, the Cheslatta made their intentions formal, stating that they were going to challenge the Huckleberry project approval before the British Columbia Supreme Court. They filed a lawsuit seeking to put a halt to the project on the grounds that it was on their traditional territory and subject to a land claim. They also believed that there were too many outstanding issues to give the project approval. Such issues included the structural safety of the mine, risks of contamination to fish-bearing water, and human health concerns. They further claimed that the social and economic costs to the Cheslatta had been ignored, insignificant compensation had been paid to the Cheslatta for the use of their land and that the proponent had provided inadequate information for impact prediction. During the ensuing months after the Cheslatta filed their lawsuit, claims that the EA process had been fast-tracked as a result of government and industry pressure were made by the Cheslatta and other opponents to the Huckleberry project. After almost two years of court proceedings the British Columbia Supreme Court made a final judgement. In the end the Cheslatta failed to have the Huckleberry project halted but the judge ruled that the proponent failed to provide adequate information for impact prediction on certain wildlife issues. The proponent was ordered to provide this information and consult with the Cheslatta in a meaningful and timely manner in regards to their concerns.

Analysis

Application of the effectiveness framework (Figure 1) to each case of First Nations' participation provides a measurement of procedural, substantive, transactive, and overall policy effectiveness. The Mt. Milligan and Kemess projects were primarily regulated by the *Mine Development Assessment Act* and the Huckleberry project review was shared by the *Mine Development Assessment Act* and the *Environmental Assessment*

Act. Therefore, a comparative analysis of the efficacy measurements between and among these cases allows the determination of the impact of the proclamation of the *Environmental Assessment Act* on the effectiveness of EA policy for First Nations' participation in British Columbia.

First Nations' participation in the EA process for the Mt. Milligan, Kemess, and Huckleberry projects adhered to the principles of *notification*, and *reporting*. However, in consideration of notification time, adjustments must be made to allow First Nations to prepare for participation if traditional ecological knowledge (TEK) is to be incorporated. The reporting of results must also take into account that the information must be appropriate to the peoples' language and abilities. All of the cases displayed characteristics that question how well the EA processes met the principles of *access to information*, *consultation techniques*, and *openness, fairness, and objectivity*. Access to information does not appear to have been achieved due to the fact that the information was not appropriate to the peoples' abilities and language and the consultation techniques employed do not appear to be preferred by First Nations, rather, agreed upon with the government. Other traits such as the perception that First Nations were not told how to become involved to influence the process, and instances where proponents of the projects supported the division rather than the building of consensus among First Nations question the openness, fairness, and objectivity of the EA processes. For these reasons none of the cases of First Nations' participation in EA are found to have procedural policy effectiveness.

The influence of the proclamation of the EAA on procedural policy effectiveness for First Nations' participation appears to be minimal. One result of the proclamation was the addition of First Nations' members to the Project Committee for the Huckleberry project. Although this change does not influence the procedural policy effectiveness for First Nations' participation in the Huckleberry as opposed to the Mt. Milligan and Kemess projects, it does however ensure that First Nations representatives are provided with information, technical personnel to aid in the understanding of information, and a role in the reporting of the results of the project review which promotes the facilitation of participation in striving towards an open, fair, and objective process.

First Nations' participation in the EA processes for the Mt. Milligan and Kemess projects achieved the objectives of *resource provision* and *representation*. The Huckleberry EA process for First Nations' participation achieved the objectives of *participation beyond voting, representation, and resource provision*. However, it must be noted that in all cases the achievement of *resource provision* and *representation* is tenuous. First Nations did receive resources, however, they appear to be lacking in respect to the amount of time given for preparation and the inappropriate form of information supplied. Representation entailed First Nations representatives that attended meetings and presentations but according to First Nations' respondents "no value was placed on our concerns". At this point and time it appears that none of the EA processes for First

Nations' participation attained the objectives of *participant learning and understanding* and it is unclear whether the limits of First Nations' authority were defined and to what extent they actually influenced the decision-making process. For these reasons, none of the EA processes for First Nations' participation are found to have substantive policy effectiveness.

The influence of the proclamation of the EAA on substantive policy effectiveness for First Nations' participation occurred in three ways: First, the legislating of First Nations representation on the Project Committee satisfies the objective of *participation beyond voting*; second, the recognition by First Nations that they have a legal right to sit on the Project Committee may encourage potentially affected non-identified First Nations to come forward, thereby aiding in the achievement of *representation*; and third, the inclusion of First Nations on the Project Committee informs members of changes in information and may aid in providing a learning forum that strives towards the achievement of *participant learning and understanding* of not only the issues but also the EA process.

First Nations' participation in the EA processes of the Mt. Milligan, Kemess, and Huckleberry projects did not achieve the objective of *time management*. The Mt. Milligan EA process avoided delays to the proponent and others, but failed to provide up-front timelines. Similar to Mt. Milligan, the Kemess EA process failed to provide up-front timelines, but due to what appears to be fast-tracking in its later stages, caused undue costs (stress) to First Nations as a result. The Huckleberry EA process, on the other hand, was subjected to a legislated timeline which due to compressed timeframes caused First Nations to experience undue costs as they had to use Band funds for technical assistance.

First Nations' participation in all three cases of EA failed to attain the objectives at the least cost as it is unknown whether preferred participation techniques by First Nations could have cost less and the costs incurred by First Nations (time, money, and stress) do not appear to have been minimized. Whether or not the cost of achieving the objectives for First Nations' participation in the EA processes was reasonable is questionable. From the standpoint of considering the monetary cost to the government/proponent in the process it appears to be reasonable. However, including the monetary and non-monetary costs incurred by First Nations the costs appear to be unreasonable. Therefore, due to the uncertainty in least cost and non-achievement of reasonable cost none of the EA processes for First Nations' participation are found to have achieved the objective of cost management. As none of the EA processes for First Nations' participation achieved the objectives of time and cost management all cases failed to have transactive policy effectiveness.

The proclamation of the EAA did not influence the transactive policy effectiveness for First Nations' participation in EA of mine development in British Columbia. However, it must be noted that the proclamation of the EAA did initiate legislated timelines in the Huckleberry EA process which provided certainty for First

Nations as to the pace of the EA process. Although the timelines provided certainty of the pace of the process for the Cheslatta they did not possess the capabilities to review the project within these timelines and were forced to incur undue costs.

Overall policy effectiveness is measured by the combination of the three aspects of effectiveness: procedural, substantive and transactive. Of the three cases of First Nations' participation in the EA processes of the Mt. Milligan, Kemess, and Huckleberry projects, not one was found to have overall policy effectiveness. This reasoning is based on the results (Figure 2), which indicate that all the cases failed to achieve procedural, substantive, and transactive policy efficacy. Although there were no cases of overall policy effectiveness, the proclamation of the EAA resulted in gains towards the achievement of overall policy effectiveness.

Essentially, the proclamation of the EAA influenced First Nations' participation in the EA process in a number of ways. First, the legislating of timelines informed and made First Nations in the Huckleberry EA process aware of the decision-making pace, whereas in the Kemess EA process First Nations experienced stress, because they felt as if the decision-making had been fast-tracked in the later stages of the process. Second, and more importantly, First Nations were given a legislated right to sit on the Project Committee for the Huckleberry EA process, which they utilized. First Nations' participation at the Project Committee level provided information and technical support. This may have aided in their learning and understanding of the information that dealt with the EA process and the project itself, and gave First Nations a role in the reporting of the results of the project review. Last, the inclusion of First Nations on the Project Committee for the Huckleberry project aided in the rigor with which the project was reviewed, resulting in design improvements and possibly long term cost savings to the proponent.

Figure 2: Summary of Procedural, Substantive, and Transactive Policy Effectiveness

EFFICACY CRITERIA	MT. MILIGAN CASE STUDY	KEMESS CASE STUDY	HUCKLEBERRY CASE STUDY
<i>Procedural</i>			
Notification	yes	yes	yes
Access to Information	no	no	no
Consultation Techniques	no	no	no
Reporting	yes	yes	yes
Open, Fair, and Objective	questionable	questionable	questionable
<i>Substantive</i>			
Participation Beyond Voting	no	no	yes
Representation	yes	yes	yes
Participant Learning and Understanding	no	no	no
Resource Provision	yes	yes	yes
Participant Influence	no	no	no
<i>Transactive</i>			
Time Management	no	no	no
Cost Management	no	no	no

Beyond Evaluation of Effectiveness

Although we demonstrate that the EA Act was not effective in its treatment of First Nations cultures – what can we take from this? Evaluation has inherent biases, both in the evaluators and the process chosen for evaluation. It is, by its very nature, often a process of testing effectiveness as defined by the values held by western developed nations. The application of the framework in this paper is no different; we have taken Sadler's effectiveness triangle and applied it to unique cultures that have been impacted by industrial development.

The underlying values that allow us to evaluate the effectiveness of policy in this instance are often inherently those of western industrialized society. The manner in which effectiveness is defined is one in which the First Nations Bands have had little or no influence. In order to illustrate this point it may be useful to reiterate the various aspects of Sadler's effectiveness triangle and consider what potential cultural assumptions are part of its core values.

The notion of procedural effectiveness assumes that the techniques and methods developed for consultation are in fact the most culturally appropriate ones. What is measured is whether the various steps that have been proposed as part of the consultation process have been implemented. What is not measured is whether these

were the most appropriate means of consultation with people from a different cultural background.

The measurement of substantive effectiveness seeks to evaluate the process in terms of its capacity to meet its stated objectives. Once again, it does not address the question of whether the objectives adequately express the concerns of the indigenous people involved in the proposed project.

Evaluation of transactive effectiveness may provide valuable information about the efficiency of the consultation process, but assumes that the concept of efficiency is shared across cultures, and that in particular the industrialized pre-occupation with practices that utilize the least possible time is universal.

Unless the way in which effectiveness is defined is shared by all of those concerned in a consultation process it may be argued that the results will be at best problematic, particularly in cross cultural environments such as those involving indigenous people who may be operating from a considerably different set of values than those who have formulated the consultation process.

The question remains: How do we develop a means to evaluate effectiveness within the First Nations' context or any indigenous culture?

Figure 2 indicates where the processes of consultation, participant learning and understanding, consultation techniques, access to information, and the whole issue of cost and time management has failed in relation to First Nations.

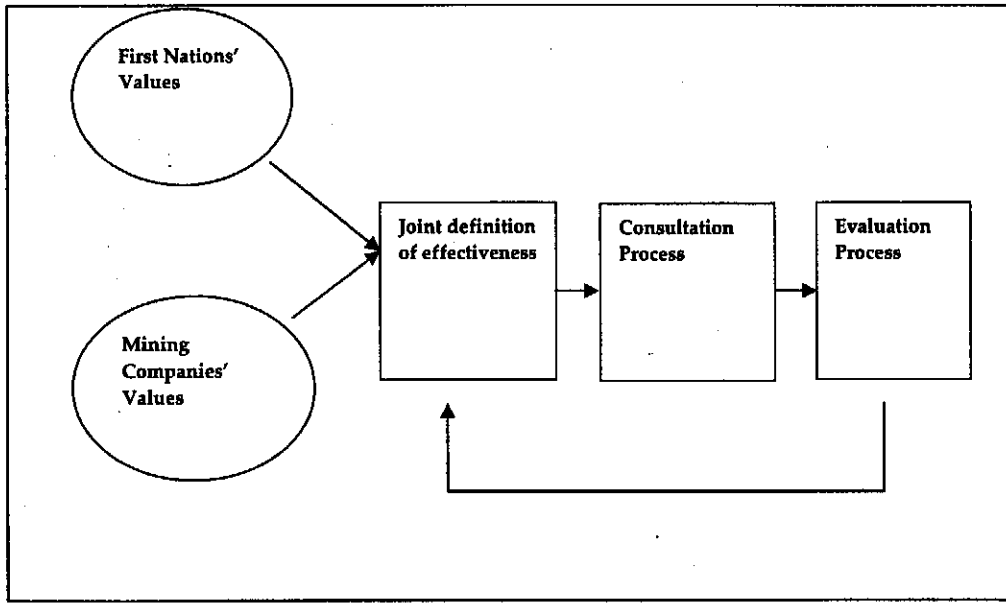
Alternative means of designing an effectiveness framework integrating these dimensions from a First Nations perspective must be developed. By engaging in a dialogue with First Nations bands with respect to what effective consultation is, it may be possible to both design a better consultation framework for environmental assessment, and a more accurate and culturally sensitive tool for evaluation.

The three categories defined by Sadler, of procedural, substantive, and transactive efficacy provide a useful starting point for this process of dialogue. Through arriving at joint understandings of the nature of these terms it may be possible to design a consultation and evaluation system that is reflective of both First Nations and mining company needs.

By developing this consensus about the nature of what is being evaluated, and of what exactly is understood when a policy is referred to as being effective it may be possible to design an evaluation process that is equally legible to all concerned. This may in turn avoid some of the tendency for projects to be targeted by subsequent legal action and delays, which are themselves often the result of processes and negotiations that were carried out on the basis of a false presumption of shared values and conceptualizations of what effective consultation processes entail (for example, the owners of the Kemess mine was taken to the British Columbia Supreme Court by the Tsay Key Dene on the issues of participation and notification). As is indicated in Figure 3, this would ideally be an ongoing process, with the derivation of joint understanding leading to a consultation process that is evaluated with respect to its effectiveness, a

process which itself would lead to further refinement and development of the shared definitions that underpin the process.

Figure 3: Utilising Sadlers' effectiveness triangle to develop cross cultural consultation strategies.



Conclusion

This study has shown that the environmental assessment processes for First Nations' participation in the Mt. Milligan, Kemess, and Huckleberry cases of mine development in British Columbia were not effective. All three cases failed to achieve procedural, substantive, and transactive efficacy and thereby failed to meet overall policy effectiveness.

Although overall policy effectiveness was not achieved for any of the cases, differences indicate that the proclamation of the *Environmental Assessment Act* resulted in gains towards the achievement of overall policy effectiveness. Essentially, the proclamation of the *Environmental Assessment Act* influenced First Nations' participation in the environmental assessment process by providing legislated timelines - thereby providing definite process timeframes - and the legislated right for First Nations to sit as members of the Project Committee. The right for First Nations to sit as members of the Project Committee provided them with additional information, access to additional technical support, a role in writing the project report review, and a greater opportunity to influence the decision-making process.

In conclusion, if First Nations' participation in environmental assessments for mine development in British Columbia continues to be applied in a similar manner to that of the three cases examined, the environmental assessment process for First Nations' participation will fail to be effective. Furthermore, if one argues that the process of decision-making for environmental assessment is part of larger mechanisms within British Columbia - such as land use management and land claim settlements - these mechanisms, by default, would not provide effective First Nations' participation. First Nations require not only the choice of methods that provide access and opportunity for their participation, they also require means such as limits of authority, adequate funding and understandable and appropriate information that allows them to take advantage of the opportunities to influence decision-making processes. As one respondent commented "In theory the Environmental Assessment Act provides the opportunity for First Nations to participate, but in reality they need the resources to take advantage of the opportunity".

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