

**Land Use Permits and Water Licences:
Improving Enforcement of
Terms and Conditions in the NWT**

by

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Abstract

Regulation and enforcement of land and water use in Canada's north is an important policy issue and an integral component of environmental protection in Canada's northern territories. This study examines the inspection, enforcement and compliance gaps that exist in the Northwest Territories (NWT). Specifically, the fact that very few inspections are carried out in the NWT is the policy problem at stake in this study. In order to better understand the problem, a multiple case study approach is used and three regions of the north, including the Yukon, the Inuvialuit Settlement Region and Nunavut, are examined. This study, while focusing on literature and publicly available reports, correspondence and other documents, also enlists an interview approach to identify key problems that exist in the north relating to inspections, enforcement and compliance. Policy options are provided and a final recommendation to combine "follow-up" programs with inspections is the concluding finding of this study.

Keywords: Enforcement; Compliance; Environmental Assessment; Mackenzie Valley Resource Management Act

Dedication

This study is dedicated to my family and friends that have supported me along my educational journey from my BA to the completion of the MPP program. I also dedicate this paper to the participants in my study and I thank them all for taking the time to discuss the important issues facing the Mackenzie Valley.

Table of Contents

Approval.....	ii
Abstract.....	iii
Dedication.....	iv
Table of Contents.....	v
List of Tables.....	vii
List of Figures.....	vii
List of Acronyms.....	viii
Executive Summary.....	x
1. Introduction: Inadequate Enforcement in the Northwest Territories.....	1
1.1. The Policy Problem.....	5
2. Background: Origins of the Problem.....	8
2.1. Outline of the Mackenzie Valley Resource Management Act (MVRMA).....	12
3. Literature Review.....	19
3.1. McCrank Report.....	19
3.2. Auditor General of Canada.....	20
3.3. NWT Environmental Audits.....	21
3.4. Heathcote: Choosing the Best Strategy.....	21
3.5. Morgan and Yeung: Law and Regulation.....	22
3.6. International Network for Environmental Compliance and Enforcement.....	24
4. Methodology.....	25
5. Case Studies.....	27
5.1. The Yukon.....	27
5.2. Nunavut.....	31
5.3. The Inuvialuit Settlement Region.....	32
6. Lessons Learned.....	34
6.1. Capacity.....	34
6.2. Remoteness/Weather.....	35
6.3. Cost.....	36
6.4. Lack of Data and Public Records.....	37
6.5. Small Number of Prosecutions.....	38
6.6. Multi-jurisdictional Nature of the Enforcement Regime.....	39
7. Criteria and Measures: A Framework for Evaluating Policy Alternatives.....	40
8. Policy Alternatives.....	45

8.1. Maintain Status Quo	45
8.2. Implement New Regulatory Tools	46
8.3. Increase Capacity	47
8.4. Increase Enforcement and Penalty Structure.....	48
8.5. Combine Follow-up Programs with Inspections and Enforcement	49
8.6. Collaboration Among Various Levels of Government and Regulators.....	49
9. Evaluation of Alternatives.....	51
9.1. Option 1: Status Quo	51
9.2. Option 2: Implement New Regulatory Tools.....	54
9.3. Option 3: Increase Capacity	57
9.4. Option 4: Increase Enforcement and Penalty Structure	60
9.5. Option 5: Combine Follow-up Programs With Inspections and Enforcement	62
9.6. Option 6: Collaboration Among Various Levels of Government and Regulators.....	64
10. Recommendation	68
References.....	71
Appendices.....	76
Appendix 1: Interview Participants.....	77
Appendix 2: Informed Consent Document	78
Appendix 3: Examples of Terms and Conditions	79

List of Tables

Table 1: Criteria and Measures Summary	44
Table 2: Policy alternatives and their respective scores	67

List of Figures

Figure 1: Map of the Regions.	3
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List of Acronyms

AANDC	Aboriginal Affairs and Northern Development Canada
AG	Auditor General
AN	Alternatives North
CEAA	Canadian Environmental Assessment Act
CEPA	Canadian Environmental Protection Act
CLCA	Comprehensive Land Claim Agreement
DFO	Department of Fisheries and Oceans
DIAND	Department of Indian Affairs and Northern Development Canada
EA	Environmental Assessment
EC	Environment Canada
EDF	Environmental Damages Fund
EIR	Environmental Impact Review
EIRB	Environmental Impact Review Board (ISR Region)
EISC	Environmental Impact Screening Committee (ISR Region)
EMR	Yukon Department of Energy Mines and Resources
ENGOS	Environmental Non-government Organizations
GLWB	Gwich'in Land and Water Board
GNWT	Government of the Northwest Territories
GNWT-ENR	GNWT Department of Environment and Natural Resources
INAC	Indian and Northern Affairs Canada
INECE	International Network for Environmental Compliance and Enforcement
IPG	Institution of Public Government
IRRAA	Inspection Reporting and Risk Assessment Application
ISO	International Standards Organizations
ISR	Inuvialuit Settlement Region
LWBs	Land and Water Boards
MOU	Memorandum of Understanding
MVEIRB	Mackenzie Valley Environmental Impact Review Board
MVLWB	Mackenzie Valley Land and Water Board
MVRMA	Mackenzie Valley Resource Management Act
NEB	National Energy Board

NIRB	Nunavut Impact Review Board
NIWA	Northern Inland Waters Act
NLCA	Nunavut Land Claims Agreement
NRCan	Natural Resources Canada
NWT	Northwest Territories
NWTWA	NWT Waters Act
OAG	Office of the Auditor General of Canada
SENES	Specialists in Energy, Nuclear and Environmental Science
SLWB	Sahtu Land and Water Board
WLWB	We'ekeezhi Land and Water Board
YWA	Yukon Waters Act
YESAA	Yukon Environment and Socio-economic Assessment Act
YESAB	Yukon Environment and Socio-economic Assessment Board
YSRB	Yukon Surface Rights Board
YWB	Yukon Water Board

Executive Summary

Resource management regimes in Canada's North (north of 60°) are complex and unique. This is due to a number of factors, most importantly, the signing of comprehensive land claim agreements (CLCA) with Aboriginal organizations, and the fact that the federal government currently exercises control over land and water management in the Northwest Territories (NWT) and Nunavut. Other factors include the obligation to consult with Aboriginal peoples, the rights of Aboriginal peoples to provide their input, a shrinking role for the federal government as devolution looms, and the complexities created by the large number of regulatory bodies that exist in the north.

This study will endeavour to analyze a key problem related to the regime in the Mackenzie Valley, namely, *too many terms and conditions included in land use permits and water licences issued in the Mackenzie Valley (NWT) are not being enforced adequately*. For example, only 13% of all permits and licences in the NWT were inspected in 2009 (OAG, 2010).

The goal of this study is to answer the following research question: how can the government of Canada increase the effectiveness of the enforcement regime in the Mackenzie Valley in order to ensure adequate enforcement of terms and conditions?

This research study employs a key informant interview, literature review and multiple case study methodology. Through the information gleaned from these methodologies a series of policy alternatives are presented and a comprehensive analysis of the alternatives is provided. Based on a series of criteria (implementation complexity, inconsistency with CLCAs, cost, stakeholder acceptability and effectiveness) I recommend that the government of Canada endeavour to implement option 5: *combine inspections and enforcement with follow-up programs*. This is the preferred option for the following reasons. To begin with this approach will likely reduce costs and in turn, increase the number of inspections carried out by enforcement officers. Costs could be reduced because both follow-up personnel and enforcement officers could travel together and verify the effectiveness of terms and conditions while concurrently verifying

compliance. This approach will also provide more information for Land and Water Boards when formulating the terms and conditions to be included in permits and licences. Combining inspections with follow-up programs will foster collaboration again enhancing the fragmented, multi-jurisdictional nature of the regime. Overall, as the evaluation above indicates, option 5 is the most effective.

In addition to the implementation of option 5 it is important for the government to carry through four other important recommendations provided in this study. First, the government should put in place the other recommendations provided by the McCrank report and reports from both SENES and the AG. For example, signing a memorandum of understanding could ameliorate the multi-jurisdictional problems that exist in the Mackenzie Valley (option 6). This would clarify roles and responsibilities, potentially making inspections and enforcement more effective. Second, AANDC, NWT Region should explore the possibility of using the Environmental Damages Fund in future prosecutions. Third, the government should make an attempt at reviewing the funding structure provided for inspections and enforcement. The funding allocations are simply too small and need to be increased. Fourth, the government must provide adequate information and data on inspections, enforcement and compliance and make that data publicly available. The expert evidence provided in this study demonstrates that this is integral to the success of any enforcement regime.

1. Introduction: Inadequate Enforcement in the Northwest Territories

Resource management regimes in Canada's North (north of 60°) are complex and unique. This is due to a number of factors, most importantly, the signing of comprehensive land claim agreements (CLCA)¹ with Aboriginal organizations, and the fact that the federal government currently exercises control over land and water management in the Northwest Territories (NWT) and Nunavut.² Other factors include the obligation to consult with Aboriginal peoples, the rights of Aboriginal peoples to provide their input, a shrinking role for the federal government as devolution looms, and the complexities created by the large number of regulatory bodies that exist in the north. This unique setting means that resource management in the north is dealt with differently than in the provinces (that is not to say that resource management is not dealt with in the provinces, but the regimes are quite different).

This study focuses on the particular regime in the Mackenzie Valley region³ of the NWT, governed by the *Mackenzie Valley Resource Management Act, 1998* (MVRMA). This legislation provides for an integrated land and water management

¹ See Derek R. Armitage: "The EA process in the Mackenzie Valley has most certainly emerged from a unique set of political circumstances (i.e., comprehensive claims agreements) not likely to be experienced in most jurisdictions" (Armitage, 2004, p. 256).

² Due to the signing of a devolution agreement in the Yukon, the federal government no longer manages land and water in the Yukon. Land and water management is a provincial responsibility under the Constitution Act, 1867, but this is not the case for the territories except where devolution has occurred. See INAC. (2001) "Yukon Northern Affairs Program Devolution Transfer Agreement."

³ The Mackenzie Valley is defined as the area in the Northwest Territories bounded by: (1) Inuvialuit Settlement Area to the north, (2) Nunavut to the east, (3) Yukon to the west (4) 60th parallel of latitude on the south (excluding Wood Buffalo National Park). (Donihee, Burch & Gilmour, 2000). For a visual description, see Figure 1: Map of the regions.

system by establishing a series of co-management boards which are institutions of public government (MVRMA, preamble).⁴ Moreover, the MVRMA provides for environmental impact assessments and a permitting process combined into one comprehensive piece of legislation.

The MVRMA was created in order to fulfill obligations set out in comprehensive land claim agreements (CLCA) with Aboriginal organizations. Thus far, land claim agreements have been settled with the Gwich'in Tribal Council (1992), the Sahtu Secretariat Incorporated (1993), and the Tlicho Government (2003). Additionally, land claim negotiations are currently underway with the Akaitcho, NWT Metis Nation, Deh Cho First Nations, Acho Dene Koe, Athabasca Denesuline and the Manitoba Denesuline. These negotiations will likely result in additional settled land claims and potentially self-government agreements in the future. It should also be noted that self-government negotiations are underway in the north even with groups that have settled modern treaties.

The map below identifies the completed land claims in the NWT and the incomplete regions. It is important to highlight that while the Inuvialuit Settlement Region (ISR) is located in the NWT it is not part of the Mackenzie Valley regime and as a result it will be dealt with as a separate region in this study. As for the southern portion of the NWT, negotiations are currently underway over land claim settlements but talks are progressing very slowly and many Aboriginal groups have overlapping claims.

⁴ Five co-management boards have been established under the MVRMA. These include the Mackenzie Valley Land and Water Board (MVLWB), the Sahtu Land and Water Board (SLWB), the Gwich'in Land and Water Board (GLWB), the Wek'eezhi Land and Water Board (WLWB), and the Mackenzie Valley Environmental Impact Review Board (MVEIRB). The MVLWB issues land use permits and water licences in unsettled territory, processes trans boundary applications and conducts preliminary screenings. The SLWB, GLWB, and the WLWB were established in accordance with Comprehensive Land Claim Agreements (CLCAs). These boards perform preliminary screenings and issue permits and licences in their respective settlement areas. As an advisory body MVEIRB conducts environmental assessments and environmental impact reviews in the Mackenzie Valley and makes recommendations/suggestions to the Minister.

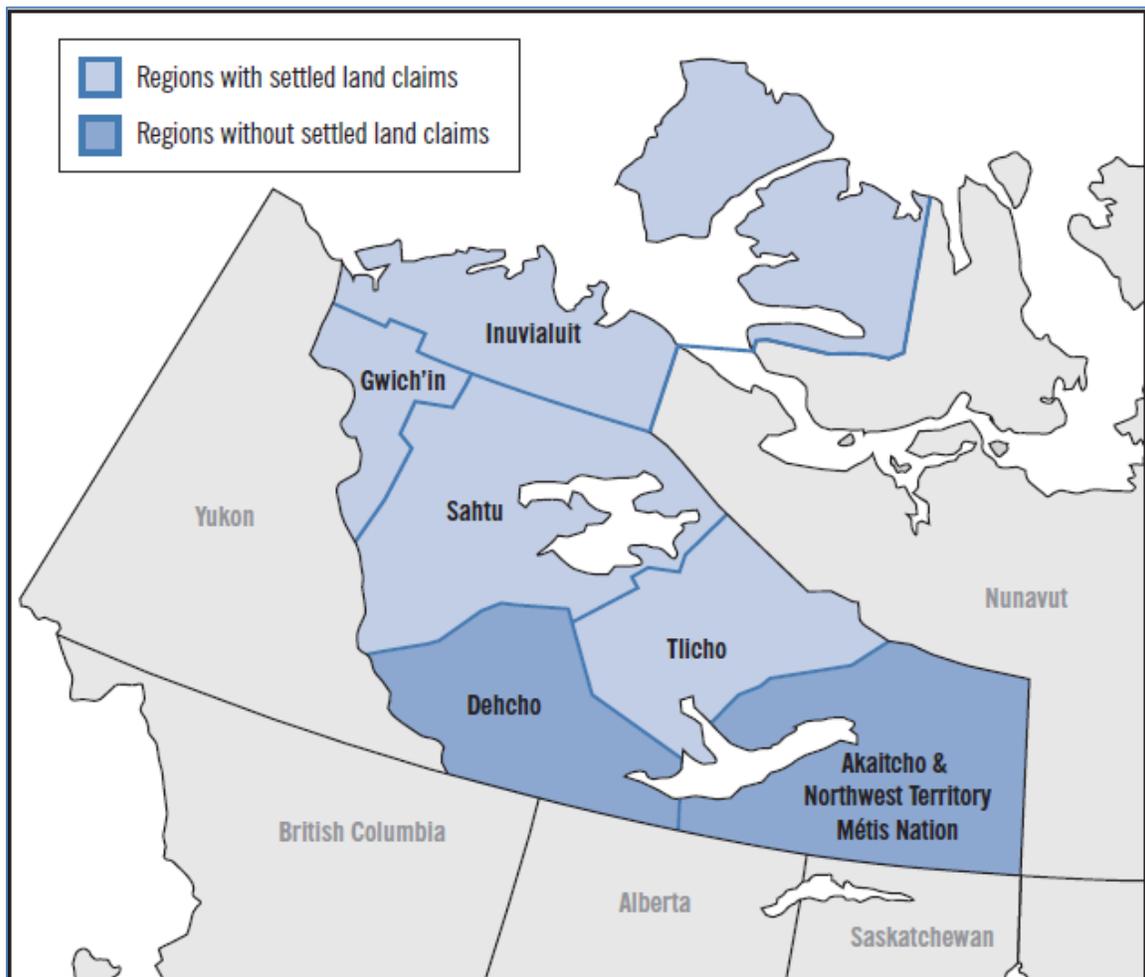


Figure 1: Map of the Regions (Shaded blue sections encompass the NWT). The Mackenzie Valley includes the blue areas with the exception of the Inuvialuit. (OAG, 2010).

In recent years, a series of issues have arisen relating to the regulatory regime in the Northwest Territories (NWT). For example, those involved in the process often highlight that the current regime is incomplete or may require adjustment because it is still a relatively new piece of legislation that is not yet fully operational. Furthermore, the processes are seen as complex, costly and unpredictable (AANDC, 2010).

Due to potential problems and opportunities for improvement, former Minister of Indian and Northern Affairs Canada (now Aboriginal Affairs and Northern Development

Canada, AANDC)⁵ Chuck Strahl, introduced the 'Action Plan to Improve Northern Regulatory Regimes' in May 2010. The plan broadly includes three elements: "legislative changes to improve Northern regulatory processes that will reduce overlap and duplication; enhanced environmental stewardship; and a strong voice for Aboriginal peoples" (AANDC, May 2010). A key legislative component (among others) of the 'Action Plan' includes amendments to the MVRMA.

As a result of the current 'Action Plan,' it is important for the government of Canada to undertake a serious and thorough analysis of the issues facing the regime in the Mackenzie Valley. In fact, the government is currently undertaking consultations with Aboriginal organizations/governments and other stakeholders regarding the amendment to the MVRMA. These issues are wide ranging and in many cases very complex. This study will endeavour to analyze a key problem related to the regime in the Mackenzie Valley, namely, *too many terms and conditions included in land use permits and water licences issued in the Mackenzie Valley (NWT) are not being enforced adequately*. For example, only 13% of all permits and licences in the NWT were inspected in 2009 (OAG, 2010).

This is an important policy problem that should be addressed as soon as practicable. It is logical to address the policy problem immediately as there is currently a mandate to resolve problems associated with the MVRMA under the 'Action Plan.' Moreover, given the fact that devolution of land water and resource management from the federal to the territorial government is imminent (in the NWT) it is important for the government of Canada to fulfill its obligations when it originally implemented the MVRMA. It is the responsibility of the federal government to ensure the MVRMA is completely implemented and operational before it is handed off to the territorial

⁵ The naming of this department is somewhat confusing due to various name changes and the legal status of the department. To clarify, Indian and Northern Affairs Canada (INAC) is the former name of the department now called AANDC. Legally the department is known by its original name Department of Indian Affairs and Northern Development (DIAND). For legal clarity, it is necessary to distinguish these differences. From time to time, these, terms may be used interchangeably and they all refer to the same department.

government. For these reasons this (and many other policy issues related to the MVRMA) should be addressed immediately.

This study consists of ten sections. The first section consists of an explanation of the policy problem being investigated. Second, the origins of the problem and some important background information are provided. Third, an overview of the MVRMA regime is set out and the policy/procedures of AANDC are outlined. Fourth, a literature review is provided that sets out the basis for best practices as they relate to inspections and enforcement. Fifth, the case studies (the Yukon, Nunavut, and the Inuvialuit Settlement Region) are presented. The sixth section is titled “Lessons Learned.” This section provides an analysis of the key issues identified by the literature and the key informants included in this study. Seventh, a framework for evaluating policy alternatives is presented. Eighth, the policy alternatives are presented and then subsequently analyzed in the ninth section of this study. The final, tenth section, includes a recommendation to AANDC and the government of Canada.

1.1. The Policy Problem

There are many policy problems related to the MVRMA and the current regime. This study, however, focuses on one specific issue regarding the regime in the Mackenzie Valley: The enforcement of terms and conditions⁶ that are included in land use permits and water licences. The policy problem can be stated as follows: *too many terms and conditions included in land use permits and water licences issued in the Mackenzie Valley (NWT) are not being enforced adequately.* The evidence demonstrates that very few inspections are carried out (as stated above, only 13% of all

⁶ For clarification purposes, the terms mitigation measures and terms and conditions may be used interchangeably. They are essentially the same thing; however, MVEIRB recommends mitigation measures and the Land and Water Boards (LWBs) implement the recommendations as terms and conditions that are included in permits and licences. Only terms and conditions are legally enforceable, whereas mitigation measures are recommendations. This is explained further in Section 2 of this study.

permits and licences in the NWT were inspected in 2009, OAG, 2010). Because of this there is an enforcement and compliance gap. This should be improved in order to ensure compliance with terms and conditions included in permits and licences. It should be highlighted that this not a unique problem to the north, rather there is "...a chronic under-enforcement of federal environmental laws" across Canada (Ecojustice, 2011, p. 11).

Before continuing, it is necessary to define the concepts of inspection, enforcement, and compliance. All three terms are intricately linked and relate directly to this policy problem. An inspection refers to the activities of an enforcement officer verifying compliance with terms and conditions of the permits and licences. Enforcement refers to any action, be it education, warning letters, or legal action carried out by a regulatory authority, which in this case is an enforcement officer. This may be an investigation into potential violations of a permit or licence. It also refers to action taken against a person or company for a violation (for example, a prosecution in court). To be clear, enforcement in the context of this study includes inspections. In other words, inspections and enforcement actions that occur during and after inspections are all directly linked together. Finally, compliance refers to the degree to which a person meets the obligations set out in permits or licences. Department of Indian Affairs and Northern Development (DIAND), NWT region defines compliance as "behaviour conforming with the laws of Canada" (DIAND Field Operation Manual, 2009).

It has become apparent through various examinations of the MVRMA that many terms and conditions are not always adequately enforced. Moreover, it has become clear that the provisions within the MVRMA pertaining to enforcement may not be strong enough. Other environmental legislation, such as the Canadian Environmental Protection Act (CEPA) has much stronger provisions regarding penalties and

enforcement options than the MVRMA.⁷ In addition to increasing penalties, the powers of enforcement officers are also weak and should be enhanced (SENES, 2010).

The question that arises is: how can the government of Canada increase the effectiveness of the enforcement regime in the Mackenzie Valley in order to ensure adequate enforcement of terms and conditions included in land use permits and water licences? Furthermore, if the enforcement regime is indeed flawed, it will be necessary to determine how the government can improve the legislation in order to enhance inspection rates and enforcement. It is important that enough inspections occur in order to maintain environmental protection of the land, water and air. Of course, we do not know how many industrial developments are negatively impacting the environment, and we do not know how many are not in compliance with their respective terms and conditions because so few sites are inspected each year. But, there is anecdotal evidence that suggests non-compliance and site abandonment negatively impact traditional lifestyles and the environment generally (L. Staples, personal communication, January 27, 2012). Until studies are conducted in order to determine the extent of non-compliance we cannot know for certain what negative impact the lack of inspections and enforcement is having on the natural environment.

Determining how many inspections or how much enforcement is necessary is a difficult determination to make. This study will provide policy alternatives that will help to determine what the appropriate level of inspection and enforcement means. Moreover, this study will provide policy options that will help ensure compliance and ultimately environmental protection for Canada's north. The next section begins to explore the background of this issue and the origins of the policy problem.

⁷ The maximum fine under CEPA is \$300,000 whereas the maximum fine under the MVRMA is \$15,000.

2. Background: Origins of the Problem

As discussed above, there are many terms and conditions⁸ in the Mackenzie Valley that are not being inspected and enforced adequately. This problem has existed for many years and according to some interview participants, the lack of inspections has negatively impacted the environment in the NWT for the past few decades.

In order to understand the origins of this problem, it is important to look at various reports on the MVRMA regime. Two environmental audits in the NWT have been completed and many reports from the Office of the Auditor General of Canada (OAG) have touched on the issue of enforcement in the Mackenzie Valley. Furthermore, boards that operate in the Mackenzie Valley have provided evidence to demonstrate that this problem does in fact exist.⁹ In addition, a comprehensive review of the regime was recently undertaken by Neil McCrank¹⁰ who also described problems with enforcement.

The two environmental audits of the NWT were completed by SENES Consultants (Specialists in Energy, Nuclear and Environmental Science) for AANDC. The NWT Environmental Audit of 2005 found that, to a varying degree, compliance and enforcement is inadequate (SENES, 2005). Recently the Audit of 2010 was released. This audit identified the fact that there are still gaps in relation to the enforcement of terms and conditions due to the fact that an appropriate rate of compliance has not been determined (SENES, 2010). They did not focus on this issue, as the Auditor General

⁸ The terms and conditions are further explained in Appendix 3 of this study. This appendix also includes a list of examples of terms and conditions that are included in land use permits and water licences.

⁹ See Appendices of the McCrank report and letters submitted on behalf of the boards that operate in the Mackenzie Valley (listed in the References).

¹⁰ McCrank was appointed on November 7, 2007 as the Minister's Special Representative (by former Minister of Indian Affairs and Northern Development, Chuck Strahl).

(AG) has already covered this issue extensively. Rather, the audit focuses on the fact that the inspection regime is very complex with many actors that have limited powers. DIAND, Environment Canada (EC), Department of Fisheries and Oceans (DFO), and the government of the NWT – Environment and Natural Resources (GNWT-ENR) all have responsibilities for enforcement. In some cases, other authorities also have responsibilities (for example the National Energy Board (NEB) is, at times, a designated regulatory agency). The auditors also highlighted the North's remoteness as a contributing factor creating problems with enforcement (SENES, 2010). They noted that the remote regions of the north can make it difficult to access sites making it challenging to carry out inspections. Thus far it is clear that there are various factors leading to low inspection rates and hence a problematic enforcement regime. These factors include no clear determination of what compliance looks like, too many agencies involved and the remoteness of Canada's north.

In addition to the NWT Environmental Audits, a key report from the Auditor General of Canada (AG) has been released which analyzes the regimes of the NWT. In this 2010 report, the AG states the following:

"In 2009 INAC was responsible for enforcing about 2,400 active permits and licences in the NWT. The Department's target for the 2008-2009 fiscal year was to inspect 50 to 60 percent of its annual caseload. We found that the Department had carried out about 300 inspections, representing 13 percent of its caseload" (p. 22).

Clearly, this does not demonstrate adequate enforcement.

In 2007/2008, Neil McCrank, special representative to Minister Strahl, conducted a comprehensive review of the regimes in the North. He found that in relation to enforcement, regulatory bodies are "disconnected" and that not all measures are enforced at an adequate level (McCrank, 2008). Moreover, participants involved in McCrank's (2008) study provided the following:

"Boards include conditions in authorizations that are beyond the scope of their mandate, and cannot be enforced by INAC inspectors. There is no system to monitor the implementation or effectiveness of conditions. [And] There is a general and functional disconnect between regulators and INAC inspectors" (p. 109).

Evidently, there is recognition of the inspection/enforcement policy problem in the north generally.

Finally, there are countless letters and correspondence that have been sent from Aboriginal organizations and governments, co-management Boards, industry organizations and Environmental Non-Government Organizations (ENGOS) to AANDC explaining their frustration with this problem. In fact the Mackenzie Valley Environmental Impact Review Board (MVEIRB) indicated in 2007 that less than 50% of their recommendations "...are actually inspected for purposes of compliance or enforcement" (MVEIRB, 11 December 2007).

It is evident that the problem exists and requires extensive analysis in order to determine the best course of action for the future. In order to maintain responsible and sustainable development in the Mackenzie Valley, terms and conditions must be enforced and compliance must be verified on a regular basis. Having environmental laws in place are not sufficient to protect the environment. "Governments must find ways to ensure that the regulated community meets the requirements put forth in the environmental laws and their implementing regulations" (INECE, 2009, p. 3).

The north is a pristine, natural wonder of Canada and it should be protected, while still allowing resource development in a sustainable manner. The Auditor General of Canada in 2010 described the "natural environment of the Northwest Territories [as] vast, fragile and unique" (OAG, 2010, p. 2). As a result, it is worth highlighting a few interesting and important facts about the north, in particular, the NWT, in order to understand why issues in the north are important and worth some attention. A summary of these facts are listed below (from: Natural Resources Canada (NRCan), 2008, unless otherwise specified):

- The longest river in Canada, at 4241 Kilometers, is the Mackenzie River
- The highest mountain in Canada is located in the Yukon: Mount Logan (5959 M.)
- The largest island in Canada is located in Nunavut: Baffin Island (507,451 sq. km's)

- The north (60 degrees latitude) contains 40% of Canada's landmass and freshwater: The NWT alone represents 13% of Canada's land mass (1.3 million sq. km's)
- 9.2% of the world's freshwater is located in the NWT and Nunavut
- 33% of Canada's natural gas and 35% of Canada's light crude oil is located in the NWT, Nunavut and Arctic Offshore (OAG, 2010)
- Over 15% of the world's rough diamonds are produced in the NWT and Nunavut (GNWT)
- Diamond mines have resulted in over \$5 billion in investment with northern and Aboriginal business (GNWT)
- The population in the north is very small. The Yukon: 34,700; The NWT: 43,700; Nunavut: 33,300 (As of July 2011 Statistics Canada). This represents 0.3% of Canada's population.
- The population reporting an Aboriginal identity: The Yukon: 7,580; The NWT: 20,635; Nunavut: 24,920 (2006 Census)

Due to the fact that so few people live in the north, it is logical to make the assumption that most "southerners" are out of touch with the realities of the north and the importance that this region plays in relation to Canada. After all, the vast majority of resources exist in the north and arctic sovereignty is a major issue for Canada. As a result, it is important to pay attention to the north and to the way its resources are managed. The International Network for Environmental Compliance and Enforcement (2009) explain that "a compliance and enforcement program that is effective and part of a larger environmental management effort will bring a broad range of benefits to society" (p. 5). In other words, an effective enforcement regime is necessary in order to maintain environmental protection and ensure that proponents do not take shortcuts causing a risk to the environment. For these reasons, we must pay close attention to the way in which we regulate and enforce the various pieces of legislation that govern resource development activities impacting the environment. The best practices related to enforcement are explained further in the literature review section.

In an effort to further understand the issue at stake, a comprehensive outline of the intricacies related to the MVRMA regime is explained in the next section. It is

important to understand how the regime operates in order to better understand what the problems are, and to identify opportunities for improvement. Moreover, once the regime is understood, it will become clear as to where the terms and conditions come from and how they are recommended and implemented into permits and licences.

2.1. Outline of the Mackenzie Valley Resource Management Act (MVRMA)

The MVRMA establishes a series of co-management Land and Water Boards (LWBs) as regulators and the Mackenzie Valley Environmental Impact Review Board (MVEIRB) as an administrative body to conduct environmental assessments (EAs) and environmental impact reviews (EIRs). The LWBs perform preliminary screenings at the beginning of the environmental review process and issue land use permits and water licences at the end. If a project is not deemed to be of significant environmental or public concern by LWBs, MVEIRB, regulatory authorities, government agencies, Aboriginal organizations and governments, or local governments, LWBs may approve proposals and issue licences or permits and impose terms and conditions. If, however, any of the groups listed above determine at the preliminary screening stage that an EA is necessary, the proposal is referred to MVEIRB,¹¹ who then conducts an EA that considers the following (MVRMA, ss. 117(2)):

1. the impact of the development on the environment, including the impact of malfunctions or accidents that may occur in connection with the development and any cumulative impact that is likely to result from the development in combination with other developments;
2. the significance of any such impact;
3. any comments submitted by members of the public in accordance with the regulations or the rules of practice and procedure of the Review Board;

¹¹ Only 5% of all developments are referred to the EA stage. Only one EIR to date is complete, and another is currently underway. (MVEIRB, www.reviewboard.ca)

4. where the development is likely to have a significant adverse impact on the environment, the need for mitigative or remedial measures; and
5. any other matter, such as the need for the development and any available alternatives to it that the Review Board or any responsible minister¹², after consulting the Review Board, determines to be relevant.

Once the EA is complete, MVEIRB can make any one of the following recommendations to the responsible minister (MVRMA, s. 128):

1. They may recommend approval of the project without mitigation measures;
2. They may recommend mitigation measures that address the significant impacts on the environment;
3. They may recommend rejection of the proposal; or
4. Order an EIR

It is up to the responsible ministers to make a final decision on the outcome of the recommendation and any associated mitigation measures. They may (MVRMA, s. 130):

1. adopt the recommendation made by MVEIRB;
2. refer the EA back to MVEIRB for further review;
3. modify the mitigation measures after consultation with MVEIRB and accept the proposal; or
4. order an EIR

The responsible ministers must approve recommendations except when option four is chosen by MVEIRB. Under the fourth option, MVEIRB may order an EIR if in MVEIRB's opinion, the development is likely to have a significant adverse impact on the environment or is a cause of significant public concern. The Minister still orders the EIR

¹² "responsible minister", in relation to a proposal for a development, "means any minister of the Crown in right of Canada or of the territorial government having jurisdiction in relation to the development under federal or territorial law." (Section 111, MVRMA) This could be the Minister of DFO for example in addition to the Minister of AANDC.

as MVEIRB is only an advisory body, therefore, it should be made clear that MVEIRB itself is advising the Minister that an EIR is required and the Minister will consult with MVEIRB to determine if this is the appropriate action to take.

Importantly, all of these provisions under the Act specify that other than ordering an EIR, MVEIRB can only make recommendations (and they also make suggestions that do not have to be implemented by the LWBs). MVEIRB has all four options available, thus they are not required to impose mitigation measures; however, if there is likely to be significant adverse impacts on the environment, MVEIRB shall consider potential mitigation measures (MVRMA, paragraph, 117 (2)(d)).

To clarify, if ordered, the final stage within the environmental impact assessment process is an EIR (MVRMA, s. 132-137.3). This review is more stringent than an EA and includes five key components (MVRMA, s. 134):

1. preparation of terms of reference for the review panel,
2. submission of an impact statement by the applicant,
3. public notification of the impact statement,
4. analysis of the proposal by the review panel, and
5. public consultations or hearings in the affected communities

In addition to the factors that must be considered in an EA, an EIR requires the consideration of the following additional factors (MVRMA, ss. 117(3)):

1. The purpose of the development;
2. Alternative means, if any, of carrying out the development that are technically and economically feasible, and the impact on the environment of such alternative means;

3. The need for any follow-up program¹³ and the requirements of such a program;
and
4. The capacity of any renewable resources that are likely to be significantly affected by the development to meet existing and future needs.

Once complete, the responsible ministers are required to make the final decision on the project. The options of the ministers are either to reject the recommendation of MVEIRB; adopt the recommendation; or refer the proposal back to MVEIRB; modify the measures after consultation with MVEIRB and adopt the recommendation (MVRMA, s. 135).¹⁴

The most important part of the MVRMA Regime in relation to this paper is what happens after the licensing and permitting stage. There are provisions in the MVRMA that relate to enforcement and compliance. Enforcement and compliance provisions are contained in Sections 84-95 of the MVRMA. The Act allows for DIAND to designate inspectors to carry out enforcement activities and verify compliance with the MVRMA. Officers (under section 84) can issue orders and take appropriate action when a permittee fails to take measures that have been ordered.

The department uses a policy manual introduced in 1998 (and continually updated, most recently, in 2009) in order to guide enforcement officers when carrying out their duties. The department uses this policy manual in all regions of the north and it uses a “risk-based system to prioritize inspections” (DIAND Field Operation Manual, 2009). In addition to the policy manual, the department is obliged to carry out certain

¹³ A follow up program is defined as “a program for evaluating (a) the soundness of an environmental assessment or environmental impact review of a proposal for a development; and (b) the effectiveness of the mitigative or remedial measures imposed as conditions of approval of the proposal” (Section 111, MVRMA).

¹⁴ There is another complexity involved in this process that should be emphasized. Depending on where a development is potentially going to take place, the Tlicho government and designated regulatory agencies (currently only the National Energy Board) have different powers and responsibilities. For example, if a development is going to take place on Tlicho lands, then the Tlicho government is also part of the final decision after an EA or EIR (MVRMA, ss. 131.2, 137.2, 139).

duties as per the provisions of the MVRMA. As will become apparent when discussing policy options later in this study, under the MVRMA, the department is required to carry out inspections. However, there are no policy tools available to the inspector other than those explicitly stated in the Act. This means that other policy tools such as self-monitoring or using economic incentives (for example) cannot be used as they would be contrary to the legislation.

According to the policy directive, compliance through communication is the most preferred tool. “Education and prevention are the primary tools to achieve compliance. Enforcement is viewed as a tool of last resort” (DIAND Field Operation Manual, 2009). Moreover, it is clear from speaking with enforcement officers in the NWT that the preferred method of compliance is taking a more collaborative approach and educating proponents about the mitigation measures. For example, an enforcement officer conducting an inspection will counsel the proponent about the reasons for doing something a certain way. Rather than telling proponents what they should do, officers prefer to explain why something must be done in a particular way. It is often the case that proponents will be much more amenable to actually complying if they understand why they are being told to do something a certain way (D. Elliott, personal communication, November 29, 2011). Furthermore, this method of compliance is preferred because it is preventative rather than reactive. From the enforcement officers’ perspective, it is better to fix a problem before it gets bigger rather than reacting to a serious disaster and imposing a major fine or even prosecuting a proponent (D. Elliott, personal communication, November 29, 2011).

The risk assessment policy (as described above) is an important tool that the department uses in order to allocate scarce resources. The department is only allocated minimal resources in order to carry out inspections.¹⁵ As a result, it is economically beneficial to use a risk-based system to determine which sites are inspected and how frequently they are inspected.

¹⁵ The budget for inspection and enforcement during the 2009/2010 fiscal year was \$830,000. But the total budget for NWT Region Operations was \$3.5 million.

The risk management system was developed in 1994 because the determination of which properties to inspect were previously unclear and in some cases random. The system sought to rectify these problems by providing a more objective and rigorous approach. The system consists of three stages:

1. Identify the potential negative impacts on the environment resulting from an activity or operation.
2. A severity and probability rating for the impacts is developed in order to determine probability of the impact (the department uses benchmarks for typical activities).
3. From the rating, inspection frequency is determined.

Recently, a new electronic system was developed called the Inspection Reporting and Risk Assessment Application (IRRAA). This system has been in use for two years and work is being done to continue to update the database and eventually include historical data from the past (A. Hopkins, personal communication, November 29, 2011). Once this system is complete the risk assessment will work much more efficiently. The system will also allow the department to start collecting data electronically (some data is currently collected and recorded manually) on compliance levels by proponents.

AANDC is also working to improve preventative action. The department is achieving a prevention goal through the use of site specific inspectors. For example, there is a dedicated officer at the Ekati diamond mine, and each of the other operating diamond mines in the NWT. "As a result of proactive communication, the inspector can discuss preventative measures at length, and possible solutions to concerns that may arise, before there is a risk of potential negative environmental impact" (AANDC, March 2009). This is just one way that AANDC is attempting to increase prevention rather than acting after the fact. It should be highlighted that while these are great examples of best practices they are not the norm.

Overall, the current standard operating procedure, or the status quo in the NWT, focuses on educating proponents in order to ensure compliance with terms and

conditions. According to AANDC taking enforcement action and prosecuting offenders is viewed as the last resort. While this approach can be effective, it is problematic because proponents are not being deterred. They know that there are currently very few consequences that flow from their actions.

The next section of this study outlines some relevant literature and expert opinions on potential policy alternatives in relation to the issue of enforcement and compliance with environmental terms and conditions.

3. Literature Review

There are a number of expert reports that focus on the issues of inspection, enforcement and compliance in the north. These reports are helpful in developing a new way forward in order to improve enforcement and compliance in the Mackenzie Valley. Improving enforcement and compliance in the NWT requires more than just hiring a few new officers and conducting more inspections. Rather, there are a variety of policy tools that should be implemented to address this problem (e.g. voluntary compliance, economic incentives, performance based regulations and/or command and control regulations etc.).

An examination of some of the key expert reports is critical in examining this issue in the context of the licencing and permitting regime in the Mackenzie Valley. These include the McCrank report, Auditor General of Canada reports, and the 2005 and 2010 NWT Environmental Audits by SENES consultants. In addition to these reports, some key scholarly articles will be examined to help determine the best way forward in dealing with this issue in policy terms.

3.1. McCrank Report

On November 7, 2007, Neil McCrank was appointed by then Minister of Indian Affairs, Chuck Strahl, as the special representative for the Northern Regulatory Improvement Initiative. In 2008, McCrank delivered his report “Road to Improvement: The Review of the Regulatory Systems Across the North.” The report focuses on the regime in the NWT and McCrank makes 22 recommendations to the Minister. The

central recommendation is the amalgamation of the LWBs in the Mackenzie Valley, creating one single board rather than the series of boards that currently operate.¹⁶

The most important recommendation is #12 because it relates directly to enforcement. This recommendation states that “the federal government and the appropriate regulatory bodies should develop a Memorandum of Understanding (MOU) concerning the issue of implementation and enforcement of recommended and accepted conditions” (McCrank, 2008, p. 27). This is intended to ameliorate the problems associated with the multi-jurisdictional nature of the regime in the Mackenzie Valley. The usefulness of this recommendation will be examined more closely near the end of this study. It is, however, something that must be kept in mind when determining the way forward, as it could be useful as a first step to achieving coordination between governments and departments.

3.2. Auditor General of Canada

The Auditor General of Canada (AG) has provided many reports regarding the northern regulatory regimes. The key report that mentions enforcement was released in 2010.

An important gap that this AG identified is the fact that AANDC is unsure as to the appropriate number of inspections that should be carried out in order to ensure a sufficient rate of compliance (OAG, 2010). In addition, the sufficient rate of compliance itself has never been identified by the department (OAG, 2010). This is problematic because neither AANDC nor the LWBs that issue permits and licences know how much compliance is sufficient. Moreover, AANDC does not report rates of compliance to the boards, further hindering the boards’ ability to issue comprehensive and effective permits and licences with appropriate terms and conditions.

¹⁶ Chief Federal Negotiator, John Pollard has been appointed to negotiate the amalgamation of the boards, however, the current status of these negotiations are unknown.

These are serious gaps that must be addressed. The AG noted that this failure to report on compliance leads to the LWBs being in the dark in respect to rates of compliance for certain terms and conditions. It would be useful for LWBs to know the compliance rates so that they could craft more effective terms and conditions. For example, a certain measure may be unattainable or unrealistic leading to proponents failing to meet the mitigation measure. However, if the LWBs do not have this information, they will be unable to improve the conditions included in permits and licences.

3.3. NWT Environmental Audits

The NWT Environmental Audits performed by SENES, as already discussed, are also very useful reports that may help to shape the way forward on this policy matter. The key recommendation made in regards to enforcement is the following:

“INAC, should, with the involvement of DFO, Environment Canada, NEB and GNWT-ENR assess and implement, as feasible, strategies, including legislative change as required, to foster co-operative and co-ordinated inspection and enforcement for environmental protection in the Mackenzie Valley. The inspection and enforcement working group under the regulators agreement for the Mackenzie Gas Project (MGP) could serve as a forum and model for these broader discussions” (SENES, 2010).

Similar to McCrank’s recommendation, the coordination amongst regulators is of utmost concern. But, the question that arises is: Will MOU’s and efforts to coordinate assist in increasing the number of inspections and resolving the enforcement and compliance gap that currently exists in the NWT?

3.4. Heathcote: Choosing the Best Strategy

In “Choosing a ‘best’ Canadian Environmental Management Strategy,” Isobel W. Heathcote (2001) discusses various environmental law frameworks. The first model she examines is the command and control system, which is simple to administer, provides clear boundaries and appears fair and consistent (Heathcote, 2001). This is a

“...detailed and specific written rule system...making extensive use of legal standards and centralized enforcement...” (Heathcote, 2001). The problem is that the government is required to have adequate enforcement capabilities under this type of regime (Heathcote, 2001). This is the case because command and control provisions must be enforced in order to ensure compliance with the regulations.

The second model Heathcote discusses is that of economic instruments. These policy tools are becoming increasingly popular, especially in OECD countries. Economic incentives as well as disincentives are commonly used. Heathcote notes that Canada does not use these instruments as often as other OECD countries. She highlights the fact that these are controversial policy instruments; however they are worth examining because they may suit the unique environment in the north.

The third model Heathcote discusses is that of voluntary compliance initiatives. The major benefit here is the reduced costs to government. Ultimately, under this model companies may be given public praise or awards for environmental stewardship, thereby increasing the competitiveness of the company. The International Standards Organization’s (ISO) certification is an example of voluntary compliance (INECE, 2009). Heathcote states that a positive aspect of this model is that it creates “good news” stories about successes rather than dwelling on “bad news” failures. This last model encourages proponents to work with government in complying with the permits and regulations. Potentially, this model could reduce the need for costly inspections by AANDC officials. Some inspections would still be required in high risk developments but according to the voluntary compliance theory the vast majority of developments would not need to be inspected.

3.5. Morgan and Yeung: Law and Regulation

Bronwen Morgan and Karen Yeung’s (2007) book, An Introduction to Law and Regulation, outlines some of the key components of compliance and enforcement. They highlight the fact that enforcement does not merely include prosecution in court. In fact, there are many “...informal practices throughout the enforcement process” (Morgan & Yeung, 2007, p. 151). This is important because it demonstrates that there is more to

inspections and enforcement than simply prosecuting offenders. For example, educating offenders is a part of enforcement.

Rule imprecision (the ambiguous nature of rules) is a key problem when it comes to enforcement. Morgan and Yeung cite J. Black who identifies three problems with rules in general. Black states that “the three main problems associated with the use of rules in any context...are their tendency to over- or under- inclusiveness, their indeterminacy, and their interpretation” (Morgan and Yeung, 2007, p. 153). Ultimately, the vagueness of regulations and the fact that it is so difficult to be 100 percent precise makes enforcement very challenging. These complexities that are inherent in rules and regulations can cause problems for enforcement officers.

There are also different styles of enforcement. D. Vogel, cited in Morgan and Yeung “...contrasts the adversarial, legalistic approach which he claims has characterized the American experience of regulatory enforcement with the British approach which he characterizes as flexible and discretionary” (Morgan and Yeung, 2007, p. 189). As is clear from the NWT base case, AANDC takes a more British approach to enforcement. It is important to recognize that one method is not necessarily better than the other; however, it is important to realize that different styles do exist.

When it comes to carrying out enforcement, Morgan and Yeung cite the “enforcement pyramid” (p. 196). According to the pyramid, the most frequent type of enforcement is at the bottom of the pyramid (persuasion) and as violations occur an officer may move up the pyramid with the most severe action: licence revocation. The key is that more enforcement should fall into the first category – the bottom of the pyramid (persuasion) rather than at the top of the pyramid whenever possible.

Morgan and Yeung identify five “classes” of instruments. These include command, competition, consensus, communication and code (or architecture). The first four instruments are relevant to environmental regulation in the context of this study. Command refers to the classic command and control model discussed above. Competition refers to the use of market mechanisms (or economic incentives, defined above). Consensus usually refers to “self-regulation,” but Morgan and Yeung admit it does have a broad range of meanings. Communication refers to compliance through

persuasion and/or education. Code is not discussed here because it does not apply to environmental regulation; it generally refers to cyber regulation and regulation through changing architecture, for example, installing speed bumps on the road.

To summarize, Morgan and Yeung's book is very useful because they lay out the foundation of regulatory tools and provide reasons why rules in general can be problematic. Morgan and Yeung's analysis demonstrates that choosing the appropriate or "best" regulatory tool is a very complex matter.

3.6. International Network for Environmental Compliance and Enforcement

The International Network for Environmental Compliance and Enforcement (INECE) released a comprehensive report in 2009 titled, "Principles of Environmental Compliance and Enforcement Handbook." This report is very useful in helping to determine best practices from an international perspective. This report confirms that there are three broad "management approaches:" voluntary, market-based, and mandatory approaches, all of which have been described above. It is, however, important to recognize that all of these approaches are internationally recognized as best practices that have both strengths and weaknesses. Moreover, these are overlapping approaches that should be used in combination with one another (INECE, 2009).

4. Methodology

The next portion of this study uses a multiple case study approach.¹⁷ This approach is interpreted in various ways. Robert Yin cites the following definition, “it [a case study] tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result” (Yin, 2003, p. 6). The purpose of the case studies analysed in this study is to do just that: discover what decisions on inspections/enforcement have been taken, how the decisions were implemented and the result of those decisions.

In order to better understand the enforcement regime in the NWT, it is necessary to understand the north as a whole. Moreover, northern regulatory policy is quite different than in the provinces as outlined in the Introduction of this study. This is because CEAA does not apply except in the Inuvialuit Settlement Region (ISR). Moreover, “made-in-the-north” strategies are often formulated using collaborative decision making (Government of Canada, 2009). Canada’s northern strategy statement from 2009 captures this point in the following quote. “Canada’s north is home to some of the most innovative, consultative approaches to government in Canada and the world. Through land claim and self-government agreements, Aboriginal communities are developing made-in-the-North policies and strategies to address their unique economic and social challenges and opportunities” (Government of Canada, 2009).

As a result, it is useful to analyse these unique regions altogether. Studying all regions of the north is also useful because some regions are further developed than others and are attempting unique approaches to resource management. For these

¹⁷ It should be noted that the majority of conclusions of this study are also based on the literature review and interviews with participants. The case study section has helped to identify common problems but only minimal solutions.

reasons it was decided that the NWT base case (fully explained in the Background section of this study) be compared against the Yukon, the Inuvialuit Settlement Region and Nunavut to examine the NWT in the context of relevant studies that are discussed under the literature review section.

In addition to the case study approach, this study employs a key informant interview methodology. In order to fully understand the regimes in each region, it is important to discuss the issues with those working on the ground. As a result, I undertook a rigorous interview process with key experts working for the federal and territorial governments, employees of various co-management boards and enforcement officers working in the regions. The interviews, for the most part, were unstructured because I wanted to hear the story of how the interviewee understood the processes and procedures that exist in their respective region. I also wanted to avoid potential biases and ensure that I did not lead the participants into answering in a certain way.

A list of participants can be found in appendix 1 of this study. All participants agreed to participate by accepting an informed consent document, included in appendix 2. All interviews were conducted over the telephone and electronic mail due to the fact that the participants were located in the regional offices in the north and national headquarters in Ottawa.

There are also a few limitations of this study that must be noted. For example, there were a limited number of participants and the inability to meet in person hindered the effectiveness of the interviews. The type of participant should also be highlighted because I only interviewed government/regulatory officials. This decision was made in order to understand the current processes in regards to inspections and enforcement.

In order to counteract the limitation of the single group of participants I have included other views from interested parties by examining the excellent public record of letters and correspondence from various organizations including industry, Aboriginal organizations, ENGOs and Boards, to the government. While this was useful I should highlight the fact that there is a lack of data in general. Government departments generally do not collect data on rates of compliance, and much of the data that *is* collected is internal information and unavailable to the public.

5. Case Studies

The case studies included in this study, the NWT (base case), the Yukon, Nunavut and the ISR were chosen because they are all distinct regions in the north with different environmental assessment regimes, and to a certain degree, different enforcement and compliance regimes. Moreover, one region cannot be fully understood without a comprehensive review of the other regions in the north. The reasons for this have been explained in the methodology section.

The next section describes the first case, the Yukon. Note that the NWT base case does not appear in this section because it has already been fully discussed in the background section of this study.

5.1. The Yukon

The Yukon is different than the other three regions for two key reasons. First, the Yukon has achieved a major land claim agreement with the majority of the first nations in the territory.¹⁸ Second, the territorial government has successfully negotiated devolution of land, water and resource management. These responsibilities are normally within the jurisdiction of the provinces; however, in the territories they are the responsibility of the federal government, specifically AANDC. The Yukon is the only territory that has had the powers of land, water, and resource management devolved, thereby making it similar to a province.

¹⁸ Eleven of fourteen First Nations have settled land claim and self-government agreements. According to AANDC in 2005 negotiations with the three remaining First Nations were suspended in 2005 and there is no government mandate to continue negotiations. (AANDC, Jan. 2012).

The environmental assessment regime and the boards that operate in the Yukon are very new and were established under federal legislation: the *Yukon Environmental and Socio-economic Assessment Act* (YESAA) which came into force in May 2003. This legislation stems from obligations the Crown undertook in the Yukon Umbrella Final Agreement and Yukon First Nations' Final Agreements (1990). The new legislation established the Yukon Environmental and Socio-economic Assessment Board (YESAB), which was set up in June 2004. This board was established pursuant to YESAA and agreements made under the CLCAs.

The YESAA legislation is very important because it ultimately replaces CEEA, which is the piece of legislation used in the provinces in respect to projects coming under the jurisdiction of the federal government. It is also an innovative piece of legislation because, although it is environmental assessment legislation, it focuses heavily on socio-economic impacts that developments may have on communities in addition to environmental impacts. While other EA legislation includes socio-economic impacts, the YESAA includes much broader considerations and the key focus is on these type of impacts. This is important because there are often substantial socio-economic impacts that may occur when a development is undertaken. For example, setting up a mine with a 5 year lifespan will provide substantial benefits to the community economically, but many negative impacts such as increased alcohol abuse can become rampant in northern mining communities (White, 2011 and Gibson & Klinck, 2005).

There are two key boards that operate in the Yukon, YESAB, and the Yukon Water Board (YWB). YESAB is an advisory board similar to the MVEIRB, in that it only has the authority to make recommendations. The YWB issues water licences and acts as a regulatory agency along with the Yukon Department of Energy, Mines and Resources (EMR). The YWB has been in existence for quite some time. It was originally created under the *Northern Inland Waters Act* (NIWA) from the early 1970's. NIWA would eventually be replaced by the *NWT Waters Act* and the *Yukon Waters Act* (YWA). The YWA is the statute that currently applies in the Yukon. When it comes to land use, the regulatory body is the territorial department of Energy Mines and Resources (EMR).

It is also important to recognize that individual First Nations have certain powers in relation to water, land and resources, as eleven First Nations have self-government agreements. Pursuant to these agreements, the respective First Nations can pass legislation (some have already done this, while others are in the process of passing legislation) in order to regulate land and water uses on their respective lands (B. Pettersson, personal communication, November 18, 2011). This means that in some cases, First Nations act as decision bodies. First Nations also have renewable resource planning councils and land use planning councils that make decisions in their respective settlement regions. These councils all originate from land claim and self-government agreements signed with Canada and the Yukon.

In the Yukon, as a result of devolution the Yukon department of EMR is responsible for enforcement and compliance of terms and conditions issued in permits and licences. Furthermore, as a result of various First Nations self-government agreements, the First Nations, on their respective territories, carry out their own enforcement if they so wish (B. Pettersson, personal communication, November 18, 2011). In addition to the responsibility for compliance and enforcement, the department of EMR issues the majority of permits and licences. This is in contrast to the NWT regime where LWBs issue permits and licences and AANDC (the federal government) carries out enforcement.

After the transfer of power under the devolution agreement, the majority, if not all, inspectors were DIAND employees and therefore they adopted very similar policies and procedures that are in use in the NWT when it comes to enforcement. The department of EMR did however make some slight modifications and they use a risk assessment approach similar to that in use in the Mackenzie Valley. Overall, the basic principles of the policy are similar to the policy described from DIAND in the NWT region (see p. 15-17 of this study for the description on NWT Region policy).

The policy can be summed up as the three “E’s”: education, encouragement, and enforcement (R. Thompson, personal communication, January 25, 2012). This is similar to the policy in the NWT where there is a strong emphasis on education rather than prosecution. In order to meet these policy objectives, the department of EMR carries out inspections at least once per year on 100% of permits and licences (R. Thompson,

personal communication, January 25, 2012). While it may seem insufficient to inspect only once per year, at least every single site *is* inspected. This is not the case in the NWT, where less than 50% of permits and licences are inspected. Based on various criteria such as the potential for problems or risks associated with a project, the Yukon department of EMR may inspect more than once per year. This department is able to carry out so many inspections because they are very well staffed and funded (R. Thompson, personal communication, January 25, 2012). .

Between January 1st and November 30th of 2011, the Yukon government conducted 803 inspections related to lands, land use, timber cutting and quarrying; and 645 inspections related to mineral exploration, placer mining water use, and hard rock mining (R. Thompson, personal communication, January 25, 2012).

The following is an excerpt from the Yukon's Mineral Services Unit Compliance and Enforcement Policy (Interim Draft):

“Inspectors will promote voluntary compliance with the legislation by employing a policy of Education and Encouragement, and will ensure appropriate Enforcement action in response to non-compliance.

Measures to promote compliance through Education include verbal and written explanations, an ongoing dialogue between inspectors and operators, written comments on inspection reports, explanatory letters, and other forms of technical assistance.

Measures to promote compliance by Encouragement include timely reminders, readiness to acknowledge a job well done, showing understanding of an operator's aims and the conditions under which they are working, seeking input from operators regarding solutions to potential issues, involving operators in decisions affecting their activities, and maintaining an effective field presence.

Enforcement activities include inspection and monitoring to verify compliance, verbal or written warnings, inspectors' directions, warning tickets, investigations of suspected violations, and prosecution.”

While this policy statement is phrased slightly differently than that of DIAND, it still has a similar purpose. Ultimately, voluntary compliance is preferred over using drastic enforcement tools in both the Yukon's department of EMR and DIAND in the Mackenzie Valley.

5.2. Nunavut

In Nunavut, Canada's newest territory, the environmental assessment regime originates from the Nunavut Land Claims Agreement (NLCA) that was signed in 1993 and came into effect on July 9, 1996. Under this agreement, the Nunavut Impact Review Board (NIRB), which conducts EA's in Nunavut, was formed. The Nunavut Water Board (NWB), an institution of public government (IPG), was also formed pursuant to Article 13 of the NLCA. The regime in Nunavut is fairly straightforward and includes the following boards and organizations: the NIRB, the NWB, the Nunavut Surface Rights Tribunal, the Nunavut Planning Commission (NPC), the Nunavut Wildlife Management Board, regional Wildlife Organizations, and local Hunters and Trappers Organizations. Some boards perform regulatory functions while others act as advisory bodies.

Devolution has not occurred in Nunavut and thus the responsibility for land, water, and resource management is the responsibility of the federal government. AANDC takes the lead role on this front, as is the case in the NWT. This will remain the case until such time that devolution takes place. The prospect of devolution in Nunavut is uncertain, but negotiations are underway.

When it comes to enforcement in Nunavut, the approach is identical to that in the NWT. This is expected because AANDC takes the lead role in both territories. There are, however, some serious issues at stake that can mostly be attributed to a lack of capacity. For example, many positions are simply unfilled due to a lack of human resources. As a result, it is very difficult to get the job done when there are no officials available to undertake inspections and carry out enforcement activities.

While there are issues in maintaining qualified personnel, the system for enforcement is well defined in Nunavut. The Field Operations Division is a section in the regional AANDC office that "inspects and enforces leases, licences, and permits issued by the Department of Nunavut" (AANDC, n.d.). There are Resource Management Officers in Kugluktuk, Rankin Inlet and Iqaluit, and two Water Resource Officers that carry out duties throughout the entire territory. Some actions that Resource Officers may take include the following: writing a warning letter, writing a letter of direction, or

pressing charges and going to court (the least preferred option). It is important to highlight that inspectors rarely, if ever, conduct impromptu inspections. Rather, they work very closely with proponents in order to provide education rather than severe punishment. More recently, AANDC has indicated that many developers are walking away from sites due to the economic downturn, forcing inspectors to spend the majority of their time with contaminated sites (R. Abernethy-Gillis, personal communication, November 22, 2011).

Nunavut's enforcement regime is essentially identical to that of the NWT, and the major problem, as stated above, is that of capacity. While the department tries to carry out inspections as often as possible, there are difficulties such as job vacancies and extreme weather. In fact, the field season for inspectors usually only runs from May-October (AANDC, n.d.). Overall, the case of Nunavut demonstrates that many problems experienced in the NWT are not unique and they are experienced in other regions of the north as well.

5.3. The Inuvialuit Settlement Region

The Inuvialuit Settlement Region (ISR) is a unique region because it is not its own territory; rather, it encompasses the far north of the NWT and a small portion of the Yukon. Although it is not its own territory the environmental assessment regime on these lands is different than all regimes discussed thus far. Although the majority of the ISR is located in the NWT it is not a part of the Mackenzie Valley Resource Management Act, rather CEAA still applies in most cases. In addition, a unique element of the ISR is that, in 1984, it became the first group of First Nations to settle a modern land claim agreement in Canada's north.

As with all other cases discussed in this paper, a land claim agreement established a number of boards that act as regulatory and advisory bodies. The Inuvialuit Final Agreement (1984) established the Environmental Impact Screening

Committee (EISC) and the Environmental Impact Review Board (EIRB). In addition, the key regulatory board is the federal NWT Water Board,¹⁹ established under the NWT Waters Act. The Wildlife Management Advisory Council also plays an advisory role in this regime.

In the ISR the federal government (AANDC) conducts inspections on crown land. Although the NWT Water Board issues licences for water uses, the responsibility of enforcement lies with AANDC. Even on private lands AANDC takes the lead role in regards to inspections and enforcement (J. Davies, personal communication, December 8, 2011).

The ISR also encounters serious capacity problems in relation to compliance activities. A recent report found that monitoring is a challenge for most ISR communities due to this lack of capacity, especially a lack of local expertise (Wootton, Durkalec & Ashley, 2008). Additionally, appropriate technology and laboratory access in order to accurately test samples is simply unavailable or very costly to come by (Wootton, Durkalec & Ashley, 2008).

In summary, the unique aspect of the ISR is that it did not join the MVRMA regime; rather, it maintains the use of CEAA and its own advisory boards in order to conduct environmental assessments. In the case of inspections and enforcement the ISR is included with the Mackenzie Valley as the NWT region. For this reason, the problems related to inspections and enforcement under analysis in this study are the same in the ISR and the Mackenzie Valley.

¹⁹ The NWT Water Board previously had jurisdiction across the NWT, however due to the creation of Nunavut and the implementation of the MVRMA the NWT Water Board only has jurisdiction in the ISR.

6. Lessons Learned

From interviews with officials, research conducted for the case studies and the literature review I find that there are six key contributing factors leading to low inspection rates detrimentally impacting the enforcement regime as a whole. These reasons include *capacity, remoteness/weather, cost, the lack of data and public records, the small number of prosecutions, and the multi-jurisdictional nature of the enforcement regimes*. These issues are hindering the ability of the regulators to carry out effective inspections and enforcement activities and require some extensive analysis before a way forward can be determined.

6.1. Capacity

The issue of capacity has been discussed by many experts in the field. Even with the extensive analyses and capacity building initiatives, the problem seems to persist and never seems to be mitigated in any way. Capacity issues arise because there is a lack of qualified personnel to carry out very technical tasks (such as inspections and enforcement) in the remote regions of Canada.

It is helpful to begin by defining what capacity means. “Human resource capacity is about ensuring that an organization has enough people with the necessary skills to achieve its objectives” (OAG, 2010a). To give another perspective, Graham White (2009) provides the following: “Reduced to essentials, it [capacity] encompasses suitable structures and processes, adequate financial resources, and sufficient staff with the proper training and expertise to develop and implement policies and to deliver services.” Here it is evident that there are many components to capacity but the major issue boils down to human resources that have the expertise to carry out their duties.

Sceptics argue that this lack of capacity contention is simply a belief that the federal government holds and it is actually untrue or exaggerated. For example, Nunavut's former Premier, Paul Okalik, calls the federal government paternalistic and he rejects the lack of capacity argument altogether (White, 2009). While this may be arguable in some respects, there is clear evidence that demonstrates capacity is a real and serious problem in the north, most notably in Nunavut.

The government of the NWT (GNWT) recognizes capacity problems and recognizes that both increasing funding and training are important to resolving this issue. The GNWT strongly supports training initiatives that will increase staff retention and knowledge (GNWT, 2009).

Ultimately, Canada needs to empower the residents of the north and continue to make improvements on attracting new talent to the area. Capacity is a common problem for the boards discussed in this paper. In fact, many vacancies exist on the co-management boards and longer terms could be implemented in order to address this problem (MVLWB, 2011). It is often difficult to find qualified experts that can make appropriate land and water use decisions. By attracting new people to the north through various incentive programs, this issue could be alleviated.

6.2. Remoteness/Weather

The remoteness of Canada's frigid north may seem to be an obvious factor, but it has a significant impact on the ability of inspectors to carry out inspections. Most inspections, for example, require that the inspector be flown in, either by helicopter or fixed wing aircraft. This is obviously a costly endeavour and is more fully explained in the next factor on cost.

Remoteness and extreme weather conditions can lead to serious problems for inspectors in the north. For example, one former inspector related the following story of the fierce weather conditions that may be encountered. The inspector was at -53 degrees Celsius and the helicopter pilot could not turn off his engine fearing that it would not start up again (D. Elliott, personal communication, November 29, 2011). These are

not only difficult conditions, but they can also be dangerous. As a result, inspectors may only have short windows of time in order to execute inspections. This hinders the ability of the regulator to carry out inspections year-round and may cause delays even when inspections are scheduled.

Unfortunately, the weather cannot be controlled and therefore it is not a problem that can be solved through policy development. It is, however, an important issue facing inspectors that must be recognized.

6.3. Cost

Cost is a complex and important factor. This factor is closely related to remoteness because often times fixed wing aircraft or helicopters are required in order for inspectors to get to sites that require inspections. According to AANDC, a helicopter costs approximately \$1500 per hour (D. Elliott, personal communication, November 29, 2011). This cost is simply for the helicopter and does not include the cost of officers themselves and the additional costs associated with carrying out inspections. Furthermore, the department does not have the infrastructure to get into the remote areas and conduct inspections. Moreover, although fixed wing aircraft are more cost effective, it is not always possible to use this mode due to extreme weather conditions (A. Hopkins, personal communication, November 29, 2011).

One way in which the department saves money is by conducting inspections in large numbers. For example, inspectors will go out for one week and inspect 10-15 sites rather than inspecting individual sites and flying back and forth so many times. In addition, Diamond mines will often fly inspectors in on their own charter plane, which saves AANDC a substantial amount of money (A. Hopkins, personal communication, November 29, 2011).

Budget allocations for the department's enforcement activities are also problematic. This is the case because, in addition to regular site inspections, the inspection budget includes other costs as well. The budget also must be used to deal with "chance" events such as fuel spills and other environmental hazards. This is

troubling for the department because they cannot use their entire budget to carry out inspections as some must be saved in order to respond to random events.

An interview participant (A. Hopkins, personal communication, November 29, 2011) provided an excellent example demonstrating this problem. Recently a squatter just outside of Yellowknife spilled gasoline that subsequently leached into a river bed. As a result, AANDC was required to pay \$150,000 in order to clean up the spill and remediate the area affected by the spill. The department prosecuted the squatter and the court ordered the squatter to pay \$50,000. Unfortunately the monies ordered by the court could likely not be paid by a squatter and, in any event, those monies are paid into the general revenue rather than into AANDC's operating budget. This is frustrating for inspectors and the department as a whole and may lead to fewer inspectors pursuing prosecution. Unfortunately, the government often fail to have the court order that the fine be paid into the federal Environmental Damages Fund (EDF)²⁰ thereby using those monies to remediate the environment and saving the government a substantial sum of money.

Overall, cost is an impediment to frequent inspections and effective enforcement strategies. It may be beneficial for AANDC to further investigate the EDF in order to recover costs from prosecutions.

6.4. Lack of Data and Public Records

As discussed earlier, AANDC has not yet determined the appropriate rate of compliance. This unknown is seriously problematic and should be determined expeditiously. Furthermore, records are difficult to find and even where records *are*

²⁰ According to Environment Canada, "The EDF is a specified purpose account created by the Government of Canada in 1995 and administered by Environment Canada to provide a mechanism for directing funds received as a result of fines, court orders, and voluntary payments to priority projects that will benefit our natural environment. A specified purpose account is one maintained separately from the general revenues of the Government of Canada" (Environment Canada, n.d.).

kept, they are rarely, if ever, released to the public. This problem is not unique to the NWT; rather, participants in this study highlighted this as an issue in all regions of the north. In the Yukon, for example, monthly inspection reports for placer mining have been released to the public since 1988, but in other resource sectors, the reporting is non-existent (R. Thompson, personal communication, January 25, 2012). On a positive note, enforcement departments are recognizing this deficiency and steps are being taken to improve reporting and the gathering of data.

Data quality and records are important because they can help with risk management assessments. More broadly, they can provide information to the public thereby enhancing the effectiveness of the enforcement strategy. It is worthwhile having this information available so that the public-at-large has greater confidence in the enforcement system. In fact, the Environment Commissioner in Quebec recently stated the following: “the availability of enforcement data allows concerned citizens to report or request action on unacceptable situations, thus allowing them to play an active role in the protection of the environment” (Ecojustice, 2011).

6.5. Small Number of Prosecutions

Over the past five years, four investigations and subsequent prosecutions in the NWT were undertaken by AANDC (A. Hopkins, personal communication, November 29, 2011). It could be argued that this demonstrates that the majority of proponents are compliant and therefore this tool of last resort is not necessary. However, this small number of prosecutions *may* demonstrate that the government is reluctant to prosecute due to high costs associated with prosecution. Additionally, the department does not inspect 100% of permits and licences so one cannot say for certain that the majority of licensees are compliant. Rather, the majority of inspected sites are compliant.

Of course, prosecution is not necessarily the best option because it, in and of itself, is extremely expensive and keeps enforcement officers in the office filing paperwork rather than inspecting sites. Moreover, according to the policy, using tools of communication is the preferred option; therefore, prosecution should be used sparingly. With that said, it is worthwhile noting the benefits of prosecution. For example, high

profile prosecutions can attract major media attention creating adverse publicity for proponents. Moreover, prosecution may deter offenders (and other potential offenders). This is because prosecution often means substantial costs to the polluter. In fact, a recent report released by Ecojustice cites Environment Canada stating that “publicizing the laying of charges and the results of prosecutions [act as] an effective means of deterring potential offenders” (EcoJustice, 2011). Evidently there are benefits to prosecutions that should not be underestimated.

6.6. Multi-jurisdictional Nature of the Enforcement Regime

Finally, as pointed out by many participants in this study and analyses by experts there are simply too many actors involved in the MVRMA regime. This complicates the regime and adds to confusion over who is responsible for enforcement of certain terms and conditions. For example, is it the sole responsibility of Environment Canada to enforce air quality standards or should the lead department, AANDC, take a lead role on all fronts and request further assistance from other departments when necessary?

This is a complex issue that is exacerbated by the fact that there are also a large number of co-management boards making decisions independently. This complexity was highlighted by McCrank (2007) leading him to recommend the amalgamation of the LWBs in the Mackenzie Valley. This recommendation, however, is controversial and would be very difficult to implement. This is because amendments to constitutionally protected CLCAs would be required in addition to consent of Aboriginal groups. This is quite unlikely as Aboriginal peoples have spent so much time fighting for the co-management rights they now have under these new agreements.

In summary, while multi-jurisdictional issues exist in the resource management regime, it is highly unlikely that the regime will be centralized. Rather, government departments, boards and other parties must work together and craft agreements and/or MOUs in order to clarify their respective roles and, where possible, avoid duplication and enhance cooperation. This process has already begun in the NWT and many working groups have been established to achieve these objectives.

7. Criteria and Measures: A Framework for Evaluating Policy Alternatives

The purpose of the evaluation of each of the respective policy alternatives (outlined in the next section of this study) is to determine the best approach to improving the inspection rates, which in turn, will improve the inspection/enforcement/compliance gap in the Mackenzie Valley. Specifically, the evaluation of options will be useful in order to answer the central research question of this paper: How can the government of Canada increase the effectiveness of the enforcement regime in the Mackenzie Valley in order to ensure adequate enforcement of terms and conditions?

Each policy alternative described in section 8 of this study is evaluated based on a series of criteria. These criteria include implementation complexity, inconsistency with CLCAs, cost, stakeholder acceptability and effectiveness. Each criterion is described in greater detail below. It should be noted that this list of criteria is not exhaustive and there is some subjectivity at play when assigning a score to each option. These criteria were chosen because they are of utmost importance when determining if a particular policy option is going to be feasible or not. This is a useful exercise, even with the subjectivity involved, because it is based on the evidence and data available. Furthermore, my work experience with AANDC means that I have a deep understanding of the viewpoints of various stakeholders interested in this policy problem. Part of my job required me to review letters and statements from various organizations including Aboriginal groups, industry, ENGOs and the boards that operate in the Mackenzie Valley. As a result of this experience, I have been able to score the various policy alternatives with greater certainty. With this in mind, these five criteria are now examined.

The first criterion, implementation complexity, is an important criterion because it determines how complex a given policy may be. Understanding the complexities of each policy is essential because it assists to determine the feasibility of the policy option.

If an option is too complex it is unlikely that it would be preferred, over an option with very few complexities. Of course, a complex option could also achieve the desired outcome; however, this regime is already quite complex and it would be problematic and unpopular if the regime was made more complex. This criterion is measured on a subjective high/medium/low scale. A rating of high is assigned to the more complex options. An option with many steps involved in order to execute the policy is viewed as being more complex. Options with fewer complexities, in that they are simple to implement, and easy to understand are rated as low. For example, highly complex options may require substantive legislative changes, many actors (i.e. many levels of government and stakeholders), and extensive consultation in order to achieve the desired objective. On the other hand, options that are scored as “low complexity” will not require these factors. Overall, recognizing and understanding the implementation complexities is useful because it will allow the decision maker to consider the challenges that will be involved when choosing the appropriate policy.

The second criterion is a simple yes or no question. That is, will the proposed policy alternative be inconsistent with the CLCAs signed by the various Aboriginal groups in the Mackenzie Valley? If it is perceived that the policy alternative may limit the intent of the CLCAs then the option is assigned a yes. If there are no perceived inconsistencies then the alternative is assigned a no. Alternatives assigned a no are preferred because the feasibility of amending CLCAs is very unlikely. This criterion hereafter is referred to as “inconsistency with CLCAs.”

Cost, the third criterion, is useful when analysing policy options because ultimately, the decision to implement a certain policy often comes down to cost. All of the policy options provided in this study will incur costs. Some options, however, will only require the current budget allocation for inspections and enforcement, which for the 2009/2010 fiscal year was approximately \$3.5 million (according to the AG) with \$830,000 dedicated strictly to enforcement (according to AANDC, NWT Region).²¹

²¹ \$3.5 million is the entire Operations Directorate budget. This includes everything including building maintenance, and other land management responsibilities.

There are twenty inspector positions in the NWT region (these positions range in salary from \$56,224 - \$79,765 + isolated post allowances). There are currently five Inspector vacancies. An inspector includes Field Operations Supervisors, Resource Management Officers (I and II) and Water Resource Officers. As a result of current vacancies salaries currently cost the department approximately \$1,020,000 with fifteen filled positions with an average salary of \$68,000.

While it is very difficult to attach a monetary value to each of the policy options in this study, an attempt is made at determining if the option will incur high costs (defined as more than \$5,000,000), medium costs (defined as \$2,000,001-\$5,000,000) or low costs defined as (\$0-\$2,000,000). Many of the options in this study will require additional monies. For example, highly complex options will incur high costs due to the fact that resources will be required in order to implement the various complexities. Other options will require the implementation of new programs and the hiring of additional staff to execute the programs, therefore incurring large costs.

Stakeholder acceptability is another criterion that must be used to determine the best policy option because it is the stakeholders that are most intimately affected by a particular policy. The stakeholders that are examined include the following: Industry, Environmental NGO's (ENGO's), Aboriginal organizations, the GNWT, and the co-management boards (i.e. MVEIRB/LWBs). These groups were not interviewed for this study due to cost and time constraints. Although not every single group listed was interviewed, there are extensive records of letters, memos, and other correspondence that set out in some detail what each groups respective position is.²² During my work at AANDC I gained a significant amount of personal knowledge of the circumstances relating to the positions of the diverging groups of stakeholders. For these reasons it was not vital to interview the stakeholders.

It should be noted that, ENGOs, Aboriginal organizations and industry organizations are three independent groups and differences exist *within* these groups;

²² See reference list for the source of these letters, correspondence, etc.

however, for the purposes of this study the groups are lumped together in an effort to generalize and determine the overall support or lack thereof for each policy alternative. Some ENGOs active in the north include Alternatives North, Ducks Unlimited, the World Wildlife Fund, and the Pembina Institute. Some industry organizations include Canadian Association of Petroleum Producers, Canadian Energy and Pipeline Association, Mining Association of Canada, and NWT/Nunavut Chamber of Mines. In the case of industry organizations they are mostly the same because they, and their shareholders, are governed by the profit motive. Accordingly, it is to their benefit to have less oversight in respect to their projects. In other words, it is beneficial to them to yield high profits and this is easier done when there is less oversight.

In order to measure the degree of stakeholder acceptability a high/medium/low measure is used. This criterion is scored as high when it clear that all of the various stakeholders would agree with or support the policy alternative. A score of medium is assigned when three of the five broad groups support the alternative. Lastly, low is assigned when less than three groups support the option.

The last criterion is effectiveness. Effectiveness refers to the extent to which the policy option achieves the intended result. In other words, does the option increase or improve inspection rates, enforcement, and compliance? Under this criterion, each option is evaluated on a high/medium/low scale. Based on the literature and evidence from interviews and case studies a determination of the effectiveness of each option is made. In addition, the effectiveness criterion measures the extent to which each policy alternative will reduce the impacts of the key factors identified in the lessons learned section. Under this criterion to what extent will the policy alternative increase capacity, and data/public records? Moreover, to what extent will the alternatives address the multi-jurisdictional nature of the enforcement regime?

Table 1: Criteria and Measures Summary

Criteria and Measures		
Criteria	Definition	Measure
Implementation Complexities	How complex will each option be to implement?	High/Medium/Low
Inconsistency with CLCAs	Will the policy alternative limit the intent of CLCA or be inconstant with CLCAs?	Yes or No
Cost	How much will the implementation of the various options cost to the government?	High (more than \$5 million) Medium (\$2-5 million) Low (\$0-2 million)
Stakeholder Acceptability	Are stakeholders in support of the policy alternative? Who is opposed and who is in favour? (Groups to consider include: Industry, Environmental NGO's, Aboriginal Organizations, the government of the NWT, MVEIRB, and LWBs)	All support (high) 3 or 4 support (medium) Less than 3 support (low)
Effectiveness	To what degree will the proposed policy option be effective? To what extent will the policy alternative increase capacity, data/public records, and address the multi-jurisdictional nature of the enforcement regime?	High/Medium/Low

8. Policy Alternatives

There are a number of alternative methods of achieving compliance and ensuring effective inspection and enforcement in the regulatory regime of the NWT. Of course, the most straightforward alternative is to maintain the status quo. In addition, five alternatives are provided based on best practices found in the literature and primary interviews with government and regulatory officials. These options are not exhaustive as there may be other modifications to the regime that could improve enforcement and compliance. These are the major policy alternatives and best practices that have been highlighted by various interested parties and experts in the enforcement/compliance field (see literature review section). There are also other grand policy solutions that relate to other aspects of the MVRMA regime that could improve resource management in the NWT. These options, such as, amalgamating LWBs, are not included in this study because they do not directly relate to inspections, enforcement and compliance. In an effort to reduce the number of options, only options directly related to inspections, enforcement and compliance are explored in this study.

The policy alternatives have been formulated through an analysis from the literature review, case studies and interview participants. Each option is explained in detail below. Note that the options are evaluated based on a series of criteria and measures explained in the previous section (7). The analysis/evaluation of the alternatives follows after the explanation of the options below.

8.1. Maintain Status Quo

The status quo is found in the DIAND, NWT Region, Compliance and Enforcement Policy Manual, 2009. Under the status quo, a more collaborative, educational approach is preferred over prosecutions and heavy handed approaches. Also, compliance activities are undertaken as much as possible based on a risk assessment. The

complexities of the status quo are defined earlier in the background section and thus will not be repeated here.

8.2. Implement New Regulatory Tools

The second option is for the government to implement new regulatory tools through legislative amendments in order to encourage compliance, thus reducing the need for inspections, enforcement and monitoring. There are five key tools classified by Morgan and Yeung (2007) that regulators can use in order to achieve compliance (these are explained in greater detail in the Literature Review section). These include command and control, competition, consensus, communication and code. It is recommended that the government explore competition and consensus tools (it is not recommended that “code” be explored as it does not apply to environmental regulation, rather it is better suited to social regulation such as cyberspace). The current regime already uses command and control (i.e. legal rules and sanctions) and the communication (ex. Education and persuasion) approaches, therefore these regulatory tools are not explored as they encompass the status quo.

Competition encompasses “...regulatory tools that harness the competitive forces arising from rivalry between competing units as a means for regulating social behaviour” (Morgan & Yeung, 2007). This tool includes economic instruments such as charges, taxes and subsidies (Morgan & Yeung, 2007).

Consensus is a term that often includes, but is not limited to, “self-regulation.” This can be a controversial regulatory tool as it basically states that industry has expert knowledge superior to the regulator and therefore, compliance may be more efficient if the industry self-regulates based on their expert knowledge (Morgan & Yeung, 2007).

A more specific model that could be explored is related to consensus but still includes an aspect of government oversight and regulation. This is the performance based regulatory model or goal-based model (the terms are used interchangeably). This model is defined as an approach to regulation that “sets performance goals, and allows individuals and firms to choose how to meet them” (Grant, Moreia and Henley, 2007). Here, the focus is on results and flexibility in getting to an end goal. Under this system proponents would be required to explain what mitigation measures are

necessary and how they would implement them. This places the onus on the proponent instead of the government.

8.3. Increase Capacity

As the “lessons learned” section demonstrates, the lack of capacity in the north is a serious problem. Therefore, one way to improve the regulatory regime in the NWT would be to implement programs or incentives that may attract new employees to the north. Moreover, increasing the ability of the department to carry out more inspections by increasing the budget is a necessary component of this option. Increasing the number of inspectors will inevitably be costly and require a substantial commitment from the government of Canada. Inspectors earn an average of \$68,000 plus an isolated post allowance. This however could be reduced substantially if different levels of inspectors were hired. For example less educated persons could be hired to verify simple terms and conditions while more complex ones would be verified by more senior level inspectors. Also, Aboriginal people could be hired in their respective community where they may be able to access sites more easily because of their location. In other words, hiring inspectors that already live in remote regions could alleviate travel costs.

Continual training programs are also important and the government recently committed \$300,000 to provide funding for increasing board capacity (GNWT, March 2009). Additional funding, however, would still be required under this option.

Capacity is indeed more of an issue in Nunavut where there are many vacancies for federal positions; however, as capacity problems exist throughout the north, it is still necessary to explore this option as it could improve the enforcement regime in the NWT.

8.4. Increase Enforcement and Penalty Structure

Many experts that have analysed the MVRMA highlight the fact that the penalty structure under the MVRMA may be too weak.²³ Under this option, it is therefore recommended that the penalties be increased. In addition, this option calls on the government to explore a new philosophy when it comes to enforcement and compliance in the NWT. It is suggested that the NWT region deviate from the current philosophy of education and cooperative compliance rather than heavy handed approaches to enforcement. In other words, the government should implement stronger penalties and carry out a larger number of inspections in an effort to increase compliance.

Under this option it is suggested that the government increase penalty structures to be in line with other pieces of EA legislation. According to section 92 of the MVRMA, the maximum fine is currently \$15,000. When compared with other environmental legislation, this is clearly not a very severe penalty. Three key examples include the Canadian Environmental Protection Act, section 272 (max. fine: \$300,000), the Fisheries Act, section 78 (max. fine: \$100,000) and the NWT Waters Act, section 40 (max. fine: \$100,000).

Moreover, it is suggested that the provisions relating to the enforcement powers of inspectors be enhanced. Currently, inspectors have very limited powers. For example, they are not designated peace officers and they have very limited enforcement options. The 2010 Environmental Audit conducted by SENES found the following:

“INAC inspectors indicated that their range of enforcement options is limited. Options between the current extremes of warning letters and courts action are required. Inspectors indicated that designation as Peace Officers and the authority to issue Summary Conviction Tickets would enable them to better enforce MVRMA authorization” (SENES, 2010).

²³ See for example, SENES, 2005 NWT Environmental Audit.

Therefore, under this option legislative amendments are required in order to increase the number of tools available to inspectors.

8.5. Combine Follow-up Programs with Inspections and Enforcement

Under this option, it is suggested that comprehensive follow-up programs that are currently being undertaken are integrated with enforcement and compliance activities. For clarification purposes, a follow-up program is defined as “a program for evaluating (a) the soundness of an environmental assessment or environmental impact review of a proposal for a development; and (b) the effectiveness of the mitigative or remedial measures imposed as conditions of approval of the proposal” (Section 111, MVRMA).

Thus, when officials undertake follow-up analysis, they would also bring enforcement officers to the site to verify compliance in addition to the verification of the effectiveness of mitigation measures. In fact, follow-up officials could also be appointed by the Minister as enforcement officers, thereby increasing the number of personnel that could undertake enforcement actions. Cost recovery may be used under this option in order to reduce costs for the regulator. There is currently no legislative ability to cost recover under the MVRMA, therefore legislative amendment would be required.

8.6. Collaboration Among Various Levels of Government and Regulators

This alternative was suggested by McCrank and other auditors that examined the NWT regime (for example SENES). They found that due to various complexities in the MVRMA regime the departments involved should formulate a collaborative process in order to achieve greater clarity. “INAC, should, with the involvement of DFO, Environment Canada, NEB and GNWT-ENR assess and implement, as feasible, strategies, including legislative change as required, to foster co-operative and co-ordinated inspection and enforcement for environmental protection in the Mackenzie Valley” (SENES, 2010). Therefore, under this option it is suggested that the various

groups involved in the MVRMA regime including LWBs, MVEIRB and the various levels of government sign an MOU in order to clarify roles and responsibilities.

9. Evaluation of Alternatives

This section evaluates each policy alternative described above based on the criteria and measures described in section 7 of this study.

9.1. Option 1: Status Quo

Implementation Complexity

The implementation complexity of the status quo is nil; there are no complexities to maintaining the status quo because it is already the operational procedure that is in place. No changes are required, therefore no implementation problems exist meaning that this option is rated low in respect to implementation complexity.

Inconsistency with CLCAs

There is no evidence to demonstrate that the status quo is inconsistent with CLCAs. If it were, then it is assumed that there would have been legal challenges. There have not been any legal challenges to the inspection and enforcement regime to date. Therefore the status quo is assigned a “no.”

Cost

There are no additional costs to maintaining the status quo as the current NWT operating budget is used to operate the status quo. It is important to note that there are also no cost savings. The status quo is assigned a medium score as the operational budget is approximately \$3.5 million.

Stakeholder Acceptability

*Aboriginal organizations*²⁴ generally do not support drastic changes to the MVRMA because they are concerned that modifications to this statute will limit the intent of their land claims and reduce their influence and impact on resource development decisions. Also, the majority of Aboriginal groups have identified capacity as a key problem in the regulatory regime in general. Most Aboriginal groups do not support changes to the regime unless they address capacity issues.²⁵ However, many Aboriginal organizations believe that environmental protection is of utmost importance; therefore the vast majority of Aboriginal organizations would like to see a more robust enforcement regime. As the AG points out, “protecting the environment is important as Aboriginal communities in the NWT depend on the wildlife, water, and land for subsistence and for economic development opportunities” (OAG, 2010).

It is important to note that not all Aboriginal groups recognize or support the MVRMA regime. For example, the Akaitcho “...has not accepted the MVRMA and does not recognize it” (Paul Boucher, opening remarks during McCrank meeting Appendix H to McCrank report). It is therefore important to ensure that potential land claim groups are included in the legislative amendment process in order to hopefully achieve buy-in from Aboriginal groups such as the Akaitcho.

ENGOs, for the most part, believe that enforcement and inspection rates are inadequate. They would therefore prefer to see a change from the status quo. Alternatives North (August 2008) in their response to McCrank highlight the fact that there is an enforcement problem and the government must ensure that “...more resources be devoted to the function [enforcement] or that creative solutions be examined.” They go on to argue that “greater accountability with inspections and

²⁴ See various letters and position statements from various Aboriginal organizations (Decho, Akaitcho, Gwichin for example, included in the reference list)

²⁵ See the McCrank Report

enforcement through tracking and public reporting would also assist with improved environmental management.”

*Co-management Boards*²⁶ support a change from the status quo as they believe that enforcement is inadequate and inconsistent. This position has been conveyed on many occasions through position statements and letters to AANDC. For example the boards are concerned “...that many of these provisions [or, terms and conditions] are not, in fact, being enforced” (MVEIRB et al. 11 December 2007). Moreover, MVEIRB in another letter indicated that AANDC is consistently failing to inspect and enforce terms and conditions (MVEIRB et al. 21 November 2007).

*Industry*²⁷ supports a dramatic change in the regulatory regime. For example, industry organizations have continually complained that the MVRMA regime is incomplete, inefficient, too costly, and time consuming, thereby hindering investment in the region.

While industry is calling for many changes to the MVRMA it is clear that they would not support changes on the enforcement and inspection provisions. Industry, rather, would prefer to be inspected infrequently and thus would prefer the status quo. This is the case because as described above, industry is motivated by profit maximization. After a review of industry submissions to McCrank and the government of Canada, the fact that they do not mention inspection and enforcement demonstrates that they are satisfied with the status quo.

*The GNWT*²⁸ would be in favour of altering the enforcement regime so long as the policy is in line with their approach to regulatory improvement. According to the

²⁶ See MVLWB GLWB, WLWB, SLWB. (18 May 2011). *Perspectives on Regulatory Improvement in the Mackenzie Valley*.

²⁷ See *Submission of the Exploration Mining Industry to the Northern Regulatory Improvement Initiative*, signed by NWT and Nunavut Chamber of Mines, Prospectors and Developers Association and The Mining Association of Canada.

²⁸ The perspective of the GNWT is deduced from the following document: (March 2009). “Approach to Regulatory Improvement.”

GNWT, their approach includes five broad categories that include: “completing the system, building toward northern control, Aboriginal interests, protecting the environment and the regulatory process.” Moreover, “the overall approach is to complete and provide adequate capacity to the integrated system of land and water regulation envisioned by the parties to the land claim agreements. Extensive restructuring is not required at this time, but targeted changes are needed to ensure the system operates as intended” (GNWT, 2009).

The position and support of the GNWT is important as devolution in the NWT is looming. As a result, of a possible devolution agreement the GNWT would like to have an efficient, well-funded regime that they will eventually take-over (similar to the case in the Yukon). It will make their job much easier once they take-over the MVRMA regime if they have an effective regime that is operating in the Mackenzie Valley.

Effectiveness

The status quo is effective in that it uses a risk management approach. This is a good approach because it allows the inspectors to prioritize inspections due to the fact that they must operate with scarce resources. The approach however, is not effective due to the fact that so few inspections are carried out, largely due to capacity and funding deficiencies. Overall, the status quo is ineffective in that the department is not inspecting permits and licences often enough. As identified in the “lessons learned” section, the status quo is contributing to the lack of capacity, the lack of data, the small number of prosecutions and the multi-jurisdictional problem. For these reasons, the status quo is rated as low in respect to the effectiveness criterion.

9.2. Option 2: Implement New Regulatory Tools

Implementation Complexity

This is a very complex option that would require legislative amendments. Making legislative amendments to the MVRMA does seem simple and easy due to the fact that the MVRMA is a federal statute and thus the government of Canada has the authority to amend the Act. It is, however, difficult and complex in that Canada has a duty to consult

with Aboriginal organizations under section 8 of the MVRMA and section 35 of the Constitution Act as held in a number of decisions handed down by the Supreme Court of Canada, including: *Haida Nation v. British Columbia (Minister of Forests)*, 3 S.C.R. 511, 2004, *Taku River Tlingit First Nation v. British Columbia (Project Assessment Director)*, 3 S.C.C. 550, 2004 SCC 74, and *Mikisew Cree First Nation v. Canada (Minister of Canadian Heritage)*, 3 S.C.R. 388, 2005 SCC 69.

As a result of consultation obligations owed by the federal government to Aboriginal people, it is extremely difficult to amend legislation that affects Aboriginal treaty rights, settled land claims and potential land claims. Thus, any legislative amendments to the MVRMA must be consistent with the CLCAs because of the constitutional protection afforded to Aboriginal peoples under these agreements. Amending CLCAs is a difficult process which will not be supported by the federal government or the organizations holding the claims unless there is unanimous support and agreement.

Implementing new regulatory tools would require extensive consultation and analysis by the regulatory authorities. If it were agreed that new tools should be implemented, they would have to be legislated and all those whom participate in the regulatory regime, including enforcement officers, would need to be trained in order to understand the new regime. For all of these reasons this alternative is rated as high in respect to the implementation complexity criterion.

Inconsistency with CLCAs

Implementing new regulatory tools would require amendments to the MVRMA which may limit the intent of the provisions set out in the CLCAs. As a result, the government would likely be required to amend both the CLCAs and the MVRMA. As explained above, amending CLCAs is likely not an option because there could be dramatic political consequences if the government unilaterally changed the intent of the land claims. For these reasons, this policy option is assigned a “yes” in that it may limit the intent of CLCAs.

Cost

The cost of implementing new regulatory tools would be very high. As indicated above many consultations, legislative amendments and training programs would be required to successfully implement this option. These are all costly endeavours for the government meaning that this option is rated as high in respect to the cost criterion.

Stakeholder Acceptability

Aboriginal organizations would not support these policy changes and would be concerned that the meaning of the MVRMA would be changed, which may detrimentally affect their constitutionally protected land claim rights. In fact, the Gwich'in Settlement Area (October 2008) in a joint letter stated the following: "To restructure or modify land claim agreements or functions of the regulatory system can be viewed as taking away Aboriginal rights and will likely be resisted – any proposed change should take the approach of improving Aboriginal participation in the regulatory system to avoid political and legal impediments to the proposal."

ENGOs would be skeptical of the new regulatory tools. Many would likely say that the new tools are offloading responsibility from the government to the proponent. Many ENGOs believe that inspection, enforcement and compliance rates are inadequate and they would prefer an option that would increase these rates.

Co-management Boards would prefer to work under the current framework. Implementing new tools would make the processes more complex. Capacity is already a problem for the boards therefore adding complexities and ambiguity to the regime could exacerbate this problem. Implementing new regulatory tools would also be costly and time consuming to implement again causing further problems for the boards which are already suffering due to a lack of capacity and underfunding.

Industry would likely support this option because regulation would be decreased and industry would be encouraged to self-regulate. This would be beneficial for industry as it would reduce inspection rates which they would favour. Fewer inspections means less time spent with inspectors and fewer modifications to their operations in order to comply with the terms and conditions. Moreover, with fewer inspections industry will have fewer penalties. All of these factors will reduce costs to industry increasing their profit which is the primary motive of any private sector company. It should, however, be

noted that smaller industrial developers may be opposed to new regulatory tools because it may be too difficult for them to meet vague, broad terms and conditions. Smaller industry groups may prefer prescriptive regulations because they are simple and easy to follow and do not require extensive analysis in order to be in compliance with the regulations.

The GNWT may support this option so long as they are properly consulted and have an influence on the decision made. The GNWT supports changes to the regime that make it more effective and cost efficient. The GNWT, due to the likelihood of a devolution agreement, would prefer the MVRMA regime be improved so that they could take over the regime without any major problems.

Effectiveness

This option could be effective however, there are serious concerns that encouraging self-regulation or performance based regulatory models will decrease compliance and cause greater risks of environmental disaster. Government oversight would be reduced under a self-regulation model meaning that companies may comply with terms and conditions less often.

This option would require new capacity building initiatives and many smaller developers would have difficulty achieving goal-based standards. This option may resolve the multi-jurisdictional nature of the regime because there would be less government involvement under this model. Overall, this option likely will not increase inspection rates or enhance the enforcement regime.

9.3. Option 3: Increase Capacity

Implementation Complexity

This option is difficult and complex in that it requires the government to introduce initiatives to attract qualified personnel to the north. Moreover, an increase in funding and training is required under this option. Although some programs already exist, this

option involves enhancing existing programs and implementing new and innovative programs that could be very complex and costly.

Inconsistency with CLCAs

Building capacity and introducing new initiatives to build capacity is not inconsistent with CLCAs. Therefore this option is assigned a “no” in relation to this criterion.

Cost

The cost for this option is high because of the fact that many new officers would need to be hired and trained. Costly, capacity building programs would also need to be implemented. These are not only time consuming processes, but they also require significant human resources in order to execute. These programs could cost upwards of \$1 million and hiring ten new officers would cost approximately \$680,000. Therefore the cost under this option is the current budget (\$3.5 million) plus 1,680,000 equalling a total of \$5,180,000. As a result, this alternative is rated as high in respect to the cost criterion.

Stakeholder Acceptability

Aboriginal organizations would support an effort to increase capacity and employment particularly those that seek to promote Aboriginal businesses. Although a number of Aboriginals are conflicted due to the fact that they generally support environmental stewardship, but they want to have less regulation by government in order to expand industry and benefit from joint venture projects that create jobs and money.

ENGOs strongly support capacity building initiatives and the hiring of new officers to carry out inspections in order to protect the environment. Alternatives North, for example, highlight the fact that capacity problems truly arise from “...the failure of the federal government to adequately fund the co-management bodies and the absence of a participant funding program” (AN, 2008).

Co-management Boards also strongly support capacity building initiatives and the hiring of new officers to carry out inspections in order to ensure that projects are

properly regulated. Co-management boards would insist on more funding for their own operations and for other community members and stakeholders to participate in the processes.

Industry is in support of capacity building and they recognize that there are capacity problems that exist in the NWT.²⁹ Industry would support initiatives to enhance information available regulators and themselves. Of course, this would improve the environmental management system by increasing efficiencies and reducing problems associated with a lack of information.

The GNWT favours capacity building initiatives, although they are concerned that hiring new officers would be costly and in turn problematic for them once a devolution agreement is finalized. This is of importance because if and when a devolution agreement is finalized all AANDC employees will become employees of the GNWT, as was the case for the Yukon after devolution.

Effectiveness

Increasing capacity would be a very effective option and would increase the ability of inspectors to carry out the required number of inspections on a regular basis. It would also solve other pressing issues currently facing northern communities, such as high rates of unemployment and most notably, it would increase opportunities and provide new jobs and training programs. Increasing capacity will not resolve the other issues identified in the lessons learned section of this study. For example, simply increasing capacity will not resolve the multi-jurisdictional nature of the regime nor will it reduce costs to government. Overall, this alternative is rated as medium because it only resolves the issue of capacity.

²⁹ See *Submission of the Exploration Mining Industry to the Northern Regulatory Improvement Initiative*, signed by NWT and Nunavut Chamber of Mines, Prospectors and Developers Association and The Mining Association of Canada.

9.4. Option 4: Increase Enforcement and Penalty Structure

Implementation Complexity

This option would require legislative amendments in order to increase the penalty structure and the tools available to inspectors. Only penalties specified in the legislation are enforceable, therefore an amendment to the provisions in the MVRMA would be required. Legislative amendment is somewhat problematic due to the reasons indicated in policy alternative number two: implement new regulatory tools. But, the complexities are reduced in this case because there is currently a team (under the 'Action Plan' mandate) working to amend the MVRMA in order to improve the legislation. Other than the legislative amendments there are no other complexities involved with the exception that new officers would need to be hired and trained in order to increase enforcement and inspection rates. Overall, making legislative amendments is complex, therefore this option is rated as high in respect to the implementation complexity criterion.

Inconsistency with CLCAs

Increasing the enforcement provisions and penalty structure is likely not inconsistent with CLCAs. Therefore this option is assigned a "no" in relation to this criterion.

Cost

This option would incur high costs to the government because increasing enforcement suggests that more officers would be required, meaning more funding be allocated to the enforcement department. Legislative amendment does not incur additional costs because as mentioned above, there is a team already amending the MVRMA and funding has already been allocated for this project.

Stakeholder Acceptability

Aboriginal organizations for the most part strongly believe that the enforcement structure is too weak and too few inspections are being carried out; therefore, they would support this approach. Some pro-development Aboriginal groups may not support this

option, as it may discourage investment and development in the region. However, Aboriginal groups generally support increasing penalties and enforcement in order to protect the environment.

ENGOs also strongly believe that the enforcement structure is too weak and too few inspections are being carried out, therefore they would strongly support this option. *ENGOs* would support changing the MVRMA in order to be comparable with other relevant legislation.

Co-management Boards would be in support of increasing penalty structures and would certainly be in favour of increasing the number of inspections. The boards, however, are deeply concerned that some terms and conditions are not enforceable. They believe that this problem should be rectified first and foremost (MVLWB et al. 18 May 2011).

Industry would not support an increase in the penalty structure as it would increase their risks of violating terms and conditions. Rather than face stiff penalties industry would prefer to work with enforcement officers in order to rectify their mistakes. Industry states in many of their letters that they are happy to work collaboratively with inspectors in order to ensure compliance with terms and conditions to the best of their ability.

The GNWT would likely favour this option but they will want to undertake further studies and analyses in order to determine the best tool to ameliorate the inspections and enforcement problems. In their “Approach to Regulatory Improvement” document they cite the 2005 NWT environmental audit that suggested penalties be increased to be in line with the Fisheries Act and other Environmental legislation.

Effectiveness

Increasing enforcement and the penalty structure is not the most effective option because, as the literature suggests, merely increasing penalties will not increase compliance. Ultimately, some proponents would do a cost-benefit analysis to determine the amount of risk they are taking. Moreover, some proponents may not understand the severity of their violations and will thus make no changes to their behaviour even with

the threat of major penalties. Rather these proponents require education and consultation with inspectors.

Also, there is no evidence to suggest that other legislation with stiffer penalties is deterring proponents from violating terms and conditions. Finally, the current policy of the government is to use severe penalties and prosecution as an absolute last resort, instead focusing on education and prevention. It is therefore unlikely that the new harsher penalties would be used if they were implemented as these penalties would still be considered only in extreme situations.

9.5. Option 5: Combine Follow-up Programs With Inspections and Enforcement

Implementation Complexity

In some ways combining follow-up programs with inspections could be a complex option. However, if implemented correctly, it will result in a fairly simple and straightforward program. The Minister under the MVRMA (Section 81) could simply provide policy direction to the enforcement department encouraging officers to combine follow-up programs with inspections and enforcement. Moreover, operational personnel could probably even make this decision without Ministerial direction or legislation. Another option would be to legislate, however the same complexities with legislating exist as described in the other alternatives. When legislating, it would be important to include a provision in the MVRMA that stipulates 'whenever a follow-up program takes place, an inspection to verify compliance shall also be undertaken by the appropriate authority.' Overall, this is not a complex option to implement because there are many different avenues that could achieve the same goal.

Inconsistency with CLCAs

There is no evidence to demonstrate the combining inspections with follow-up programs would be inconsistent with CLCAs. Therefore this option is assigned a "no" in relation to this criterion.

Cost

The cost for this option is minimal as resources are already allocated for follow-up programs and inspections. Therefore, by combining the two and increasing the number of personnel available to conduct follow-up and inspections, costs may actually be reduced under this option. At the very least, AANDC could justify using the budget allocated for follow-up programs to enhance the inspection and enforcement budget.

Stakeholder Acceptability

Aboriginal organizations would support this option as it would improve the regime. Moreover, there is no evidence to demonstrate that combining follow-up and enforcement would detrimentally impact Aboriginal rights or be inconsistent with CLCAs. Combining follow-up with enforcement would increase information available to participants in the regime and enhance compliance benefiting the Mackenzie Valley region as a whole. For these reasons, Aboriginal groups would support this option.

ENGOs would support this option, as it increases collaboration and potentially the number of inspections as well. Moreover, this is a unique approach and ENGOs support thinking outside the box and finding innovative solutions to the problem at hand.

Co-management Boards would support this option because it would increase the available data and knowledge that could help boards in determining the best terms and conditions for future permits and licences. In order for the boards to support this alternative, reporting requirements would have to be enhanced. The boards are concerned that they do not receive enough information on the effectiveness of terms and conditions. Therefore they would want to ensure that information gets passed along in a timely manner.

Industry would not oppose this option, as it should increase the effectiveness of the regime and could also provide more valuable information to proponents. In addition, it allows industry more flexibility and a more effective way, as opposed to prosecutions, to engage in a collaborative process with government.

The GNWT would prefer this option because it improves the regime and could reduce costs. This would be a benefit for the GNWT if and when devolution occurs.

Again, as stated earlier it is in the best interests of the GNWT to have an effective resource management system in place before devolution occurs. That way, the GNWT will reduce the number of difficulties and challenges during the transfer of jurisdiction.

Effectiveness

Combining follow-up programs with enforcement and inspections could be an effective option because it would allow follow-up personnel and inspectors to work together in assessing the effectiveness of terms and conditions while verifying compliance. Moreover, this option could save costs and in turn, allow for an increased number of inspections. This is the case because, as explained above, the number of personnel could be increased by having more AANDC officials in the field verifying compliance and the effectiveness of terms and conditions. Also, having more personnel participating in the assessment of the effectiveness of terms and conditions and verifying compliance could mean that better information would be collected. Information is of key importance when it comes to major projects because it allows EA decision makers to make better decisions more quickly and it allows proponents to determine if their project is even feasible since they will be able to understand the ecosystem. This alternative would increase data and could ameliorate the multijurisdictional problem in the Mackenzie Valley. Therefore, this alternative is rated as high.

9.6. Option 6: Collaboration Among Various Levels of Government and Regulators

Implementation Complexity

Under this option the various levels of government (including various departments within each level) and co-management boards would be required to engage in a consultation process in order to clarify their roles. Once an agreement is in place an agreement could then be drafted and signed by the respective parties. This could be a time consuming process and it would be a challenge to get all of the parties together as there are so many with differing priorities, therefore it may be difficult to get everyone in the same room at the same time. An extensive amount of time and effort would be

required to come to an agreement making this a fairly complex option to implement therefore this option is rated as medium.

Inconsistency with CLCAs

There is no evidence to demonstrate that this alternative would be inconsistent with CLCAs. Therefore this option is assigned a “no” in relation to this criterion.

Cost

The cost for this option is minimal as the various government departments would simply be required to consult with each other in order to determine the best approach to an agreement on collaboration. After consultation a document would need to be drafted and signed by all parties. The only costs associated with this option are the time and human resources required to formulate such a document.

Stakeholder Acceptability

Aboriginal organizations would support this option as it would improve the regime. Aboriginal organizations, however, would prefer to be involved in the consultation process leading to a signed MOU.

ENGOs would support this option, as it increases collaboration and will clarify roles and responsibilities. The regime, in many ways is fragmented and requires an extensive amount of time and effort in order to reduce the fragmentation. However, Alternatives North would argue that this option is too simplistic and will not solve many problems at all.

Co-management Boards would support this option because it would clarify their roles and responsibilities. However, boards would insist on being involved in the consultation process as they play a significant role in the MVRMA regime.

Industry would support this option as it would provide greater certainty and clarity to developers. Industry is deeply concerned with the uncertainty in the north and they are worried that investment in the north is hindered by this uncertainty.

The GNWT would support this option because it improves the regime and could reduce overlap. This would be a benefit for the GNWT if and when devolution occurs. This is the case because roles would be clarified ensuring a smooth operation of the enforcement system.

Effectiveness

Collaboration among government departments and various levels of government could be effective to a certain extent. While it may resolve issues related to the multi-jurisdictional nature of the MVRMA regime, it will not increase inspection rates and it will not enhance the enforcement regime overall. In fact, many of the parties involved in the regulatory portion of the resource management system are already working collaboratively; therefore it is difficult to argue that signing a piece of paper will enhance the effectiveness of the enforcement system.

Table 2: Policy alternatives and their respective scores

	Implement- ation Complexity	Inconsistency with CLCAs	Cost	Stakeholder Acceptability	Effectiveness
1: Status Quo	Low	No	Medium	Low	Low
2: New Regulatory Tools	High	Yes	High	Low	Low
3: Increase Capacity	Medium	No	High	High	Medium
4: Increase Penalties	High	No	Medium	Medium	Medium
5: Combine Follow-up with Enforcement	Medium	No	Medium	High	High
6: Collaboration	Medium	No	Medium	High	Medium

10. Recommendation

“On paper, Canada has many seemingly impressive environmental laws. In practice, key elements of these laws are rarely, if ever, implemented” (Boyd, 2003, p. 237). The MVRMA is no exception. In fact, the federal government has admitted “...environmental laws alone are not enough to guarantee a cleaner, better environment. These laws also need to be enforced” (OAG, 2011, p. 1). In this case, it is clear that the MVRMA is not being effectively enforced in so far as it applies to land use permits and water licences. The inspection rate which is well below 50% demonstrates that the department is not inspecting enough permits and licences. This leads to a lack of information and uncertainty regarding how many permits and licences are actually in compliance with their respective terms and conditions.

An effective enforcement regime is necessary in order to maintain environmental protection and ensure that proponents do not take shortcuts, thereby causing a risk to the environment. Canadians, especially northerners, must pay close attention to the way in which government regulates and enforces the various pieces of legislation that govern resource development activities impacting the environment. This is particularly critical given that the NWT is a fragile ecosystem and must be developed sustainably if it is to protect the pristine nature of the north for future generations.

This study’s goal is to answer the following research question: how can the government of Canada increase the effectiveness of the enforcement regime in the Mackenzie Valley in order to ensure adequate enforcement of terms and conditions?

Based on the criteria and measures analysis above, it is recommended that the government of Canada endeavour to implement option 5: *combine inspections and enforcement with follow-up programs*. This is the preferred option for the following reasons. To begin with this approach will likely reduce costs and in turn, increase the number of inspections carried out by enforcement officers. Costs could be reduced

because both follow-up personnel and enforcement officers could travel together and verify the effectiveness of terms and conditions while concurrently verifying compliance. This approach will also provide more information for LWBs when formulating the terms and conditions to be included in permits and licences. Combining inspections with follow-up programs will foster collaboration again enhancing the fragmented, multi-jurisdictional nature of the regime. Overall, as the evaluation above indicates, option 5 is the most effective.

In addition to the implementation of option 5 it is important for the government to carry through four other important recommendations provided in this study. First, the government should put in place the other recommendations provided by the McCrank report and reports from both SENES and the AG. For example, signing a memorandum of understanding could ameliorate the multi-jurisdictional problems that exist in the Mackenzie Valley (option 6). This would clarify roles and responsibilities, potentially making inspections and enforcement more effective. Second, AANDC, NWT Region should explore the possibility of using the Environmental Damages Fund in future prosecutions. Third, the government should make an attempt at reviewing the funding structure provided for inspections and enforcement. The funding allocations are simply too small and need to be increased. Fourth, the government must provide adequate information and data on inspections, enforcement and compliance and make that data publicly available. The expert evidence provided in this study demonstrates that this is integral to the success of any enforcement regime.

The problems in the Mackenzie Valley that relate to inspections and enforcement are numerous and complex. These problems, as this study has identified, (in the lessons learned section) are the result of the lack of capacity, remoteness/weather, cost, lack of data and public records, the small number of prosecutions, and the multi-jurisdictional nature of the enforcement regimes.

By following the recommendations set out in this study the rate of inspections will be increased and the enforcement system will be enhanced. If the government of Canada fails to follow these recommendations, it is only a matter of time before the environment will be irreparably harmed. Major reports from the Office of the Auditor General of Canada, Neil McCrank, SENES Consultants and organizations such as

Ecojustice draw similar conclusions that this study has identified. These reports recognize the significance of the inspection, enforcement and compliance gap. This is a serious problem that must be rectified. This problem is not unique to the north, rather it exists throughout Canada. It is, however, particularly important in the north given the fragile ecosystem and enormous potential for resource extraction. This development must be undertaken responsibly and an effective enforcement regime is necessary in order to ensure that sustainable resource development occurs in the Mackenzie Valley.

Without a comprehensive and serious review of the inspection and enforcement system in the Mackenzie Valley and the implementation of these recommendations there is little to no hope for the region because the fragile ecosystem will be damaged beyond repair. Very few people live in the north and their voice is often lost given the profit motive of industry that more often than not results in resources being extracted at the lowest cost possible no matter what the cost is to the environment. Accordingly, the time for government to take concerted and decisive action in the form of the proposed recommendations is now; any delay is simply unacceptable.

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Appendices

Appendix 1: Interview Participants

Executive Director YESAB: Bengt Pettersson (18 November 2011)

AANDC: Robyn Abernethy-Gillis (22 November 2011)

AANDC: Dan Elliot (29 November 2011)

AANDC: Annette Hopkins (29 November 2011)

NWT Water Board Executive Director: Jan Charles Davies (8 December 2011)

Yukon Energy Mines and Resources: Rob Thompson (25 January 2012)

Whitehorse, Yukon: Lindsay Staples (27 January 2012)

Appendix 2: Informed Consent Document

Title of study: Land Use Permits and Water Licences: Improving Enforcement of Terms and Conditions in the NWT

Application Number: 2011s0667

PI: Patrick Wruck

Hello,

I am currently writing a Masters thesis under the supervision of Doug McArthur at the School of Public Policy, at Simon Fraser University in Vancouver, BC.

I am performing research on the enforcement regimes related to environmental mitigation measures in the Yukon, NWT, Nunavut and Inuvialuit. The purpose of this research is to determine appropriate policy tools in order to ameliorate the lack of enforcement and maintenance of compliance. As a result I would like to interview you in order to gain further insight and knowledge in relation to this issue. The information you provide may become a part of my Masters Thesis and if you wish to have your identity concealed I can conceal it to the best of my ability. However, please be advised that because we are communicating over the phone or via email I cannot guarantee confidentiality.

If you have any concerns or complaints you may direct them to supervisor Doug McArthur at doug.mcarthur@sfu.ca or Dr. Hal Weinberg, Director, Office of Research Ethics at hall_weinberg@sfu.ca.

If you wish to obtain research results they will be available at the SFU Library once the study is complete.

All of the information that you provide will be kept in a locked drawer for two years until such time as it is destroyed.

There are no anticipated risks associated with this study, however you may benefit in that you will have the opportunity to help me make complete and informed recommendations to policy makers.

If necessary, please advise me if permission has or has not been sought from your employer.

Do you agree to participate in this study?

Appendix 3: Examples of Terms and Conditions

The following two sections “Water Licences” and “Land Use Permits” are from the MVWLB webpage.

Water Licences

Licences for the use of water and deposit of waste in waters flowing through or overlying lands within the Mackenzie Valley are issued by the respective Land and Water Board (Board) operating under the Mackenzie Valley Resource Management Act (MVRMA). Acting under the authority of the MVRMA, the *Northwest Territories Waters Act (NWTWA)*, and the framework set out in the *Northwest Territories Water Regulations (NWTWR)*, the Board may issue, amend, renew, suspend or cancel water licences.

Some of the activities that require a Water Licence are:

- 100 m³ or more of direct water use per day;
- A municipality or camp that uses more than 50 m³ of water per day;
- Construction of a structure across a water course five or more metres wide at ordinary high water mark;
- Channel and bank alterations, erosion control, diversion of water, alteration of flow or storage of water (dam or storage reservoir);
- Draining or infilling of a water course;
- Any deposit of waste (solid waste, sewage, oil drilling etc.); and
- Industrial or mining and milling activities that use more than 100 m³ of water per day.

<http://mvlwb.com/process/water-licence/>

Land Use Permits

Details on the types of land use activities that require a land use permit are set out in sections 4 and 5 of the Mackenzie Valley Land Use Regulations (MVLUR). Land use activities within the Mackenzie Valley that may require a land use permit include:

- Use of explosives;
- Use of vehicles;
- Drilling;
- Hydraulic prospecting;
- Earth moving and clearing;
- Campsites;
- Fuel caches; and,
- Preparation of lines, trails, or rights-of-way

<http://mvlwb.com/process/land-use-permits/>

The following is an excerpt from an active Land Use Permit issued by the MVLWB to Seabridge Gold Inc. for Mineral Exploration in the Mackenzie Valley (February 25, 2011). See the following link for the entire permit:

26(1)(m) Fuel storage

- | | | |
|-----|--|----------------------|
| 53. | The Permittee shall report in writing to an Inspector the location and quantity of all fuel caches within ten days of their establishment. | REPORT FUEL LOCATION |
| 54. | The Permittee shall not place any fuel storage containers within 100 metres of the normal high water mark of any water body, unless otherwise authorized in writing by an Inspector. | FUEL BY STREAM |
| 55. | The Permittee shall locate mobile fuel facilities on land when stationary for any period of time exceeding 12 hours. | FUEL ON LAND |
| 56. | The Permittee shall not allow petroleum products to spread to surrounding lands or into water bodies. | FUEL CONTAINMENT |
| 57. | The Permittee shall mark all stationary petroleum products storage facilities with flags, posts, or similar devices so that they are at all times plainly visible to local vehicle travel. | MARK FUEL LOCATION |
| 58. | The Permittee shall seal all container outlets except the outlet currently in use. | SEAL OUTLET |
| 59. | The Permittee shall mark all fuel containers, including 205-litre drums, with the Permittee's name. | MARK CONTAINERS |
| 60. | The Permittee shall ensure that adequate contingency plans and spill kits are in place, prior to commencement of operations, to respond to any potential spills. | SPILL RESPONSE |