



KEY FACTORS FOR ENVIRONMENTAL ASSESSMENT/ REGULATORY SUCCESS IN CANADA'S MINING AND ENERGY SECTORS

Submission for the 2008 Energy and Mines Ministers' Conference

*Prepared by the Energy and Mines Ministers
Regulatory Performance Improvement Working Group
August 2008*



Table of Contents

| | |
|--|----|
| Introduction | 1 |
| Regulatory Phases and Key Success Factors | 2 |
| A. Pre-Project Application Phase | 3 |
| B. Project Application Phase | 4 |
| C. Environmental Assessment/Regulatory Review Phase..... | 4 |
| D. Permitting/Monitoring and Enforcement Phase..... | 6 |
| E. Post-Closure Review and Assessment, and Project Evaluation Phase..... | 6 |
| Case Studies | 9 |
| Improving the Environment for Investment in the Atlantic Offshore Petroleum Sector | |
| • Part I – The Atlantic Energy Roundtable..... | 9 |
| • Part II – Deep Panuke | 13 |
| Emera Brunswick Pilot Process | 17 |
| Information Management System - Saskatchewan..... | 21 |

INTRODUCTION

This document identifies key factors for improving environmental assessment/regulatory processes for energy and mining projects, and provides case studies to demonstrate the successful application of these factors and the lessons learned.

The purpose of the document is to communicate to regulators:

- twelve key success factors for improving environmental assessment/regulatory processes; and
- four case studies that demonstrate the effectiveness of some of these factors.

These twelve key success factors provide a checklist for regulators to guide and evaluate regulatory performance across Canada.

The factors identified for improving energy and mining project environmental assessment/regulatory processes focus on achieving a thorough review of the project while ensuring process efficiency and effectiveness. The environmental assessment/regulatory processes must be efficient, expeditious and transparent to ensure community engagement and social licence, and to maintain the competitive edge of Canadian energy and mining projects.

The twelve key success factors are presented in the context of five regulatory phases since the primary audience for this document is regulators. The foundation for regulatory success begins pre-application and continues right through to the post-closure review and assessment phase. The factors are meant to be integrated throughout the entire regulatory process, although some may be of particular importance to a specific phase. While many projects involve formal or legally mandated environmental assessment, the factors are sufficiently general to apply to both large and smaller projects where multiple agencies and departments are involved.

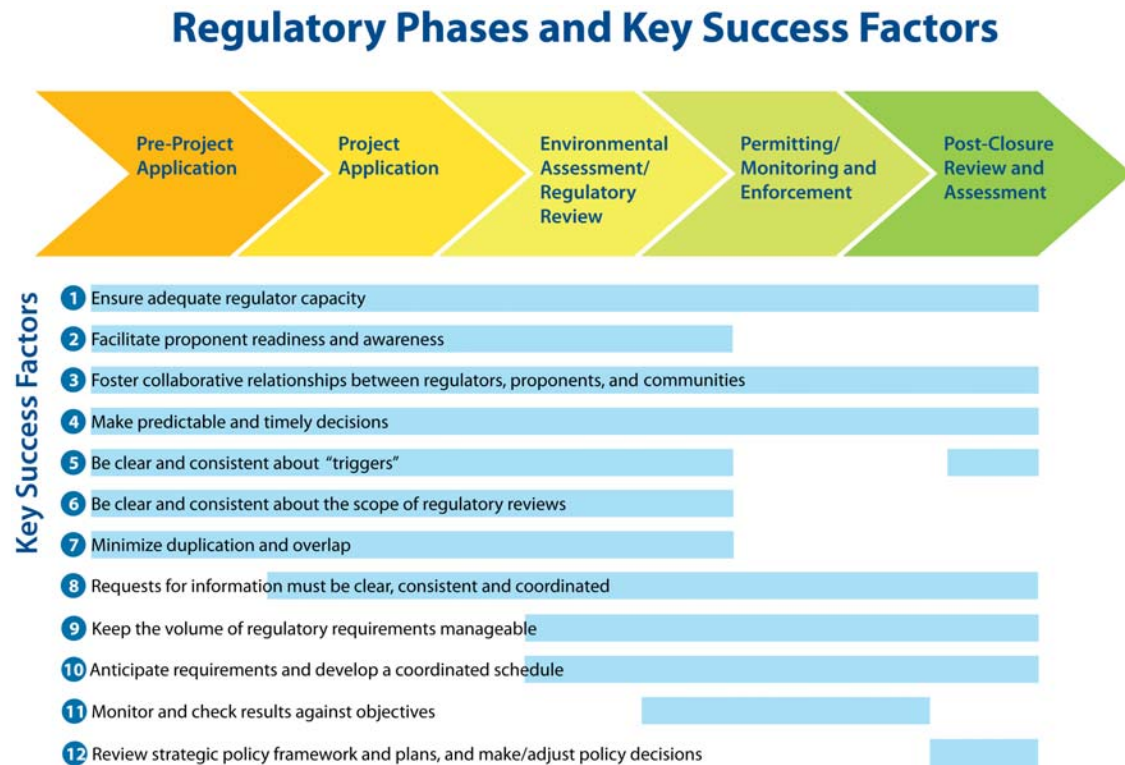
This document has been prepared by the Regulatory Performance Improvement Working Group (RPI WG), which is a joint committee reporting to the Council of Energy Ministers and the Energy and Mines Ministers' Conference. The group consists of federal, provincial and territorial officials representing energy and mines departments across Canada. These officials drew from their collective experience in the approval of energy and mines projects, with the intent of disseminating knowledge and experience among departments and jurisdictions across Canada.

We thank the members of the Environmental Assessment Task Group of the Canadian Council of Ministers of the Environment, and various regulators and industry associations, for their review of this document.

REGULATORY PHASES AND KEY SUCCESS FACTORS

Figure 1 below illustrates the five regulatory phases and twelve key success factors that are discussed in this document. These factors are meant to be integrated throughout the entire regulatory process, although some may be of particular importance to a specific phase.

FIGURE 1



These twelve key success factors provide a checklist for regulators to guide and evaluate regulatory performance across Canada. A description of each of the regulatory phases and key success factors follows.

A. PRE-PROJECT APPLICATION PHASE

Regulators work closely with proponents in advance of receiving project applications as a means of improving the quality of project information to be filed. Regulators should also encourage proponents to conduct early and ongoing community engagement as a means of identifying issues, and develop an efficient process for the review of the project.

Some key factors:

1. Ensure adequate regulator capacity

- Prepare work plans and make timely budget requests to ensure regulators are resourced to respond to anticipated regulatory workloads.
- Reassess workload requirements on a regular basis to allocate adequate internal resources.
- Develop human resource strategies to address challenges such as an aging work force, succession management, and access to skilled personnel.

2. Facilitate proponent readiness and awareness

- Encourage regulators and proponents (especially new entrants and smaller players) to maintain regular contact on the progress of plans for mining and energy developments.
- Encourage proponents to conduct preliminary site characterization work suitable enough to allow regulators to make decisions on the nature and scope of the project and environmental assessment.
- Provide guidance documents that enable proponents to adequately prepare for, and proceed with, regulatory reviews.
- Ensure existing information held by government relating to baseline environmental and other technical information is readily available to proponents, parties with specific interests, and the public.

3. Foster collaborative relationships between regulators, proponents and communities

- Identify opportunities from the start between regulators for developing the most efficient and effective environmental assessment/regulatory process possible.
- Encourage proponents to conduct early and meaningful meetings with all Aboriginal groups and stakeholders that are potentially affected as a means of identifying social, economic and environmental issues up front.
- Consider use-based and traditional knowledge systems along with scientific and technical information.
- Ensure that the environmental assessment/regulatory process requirements are communicated, transparent, effective, and efficient in order to enable community engagement and social licence.

B. PROJECT APPLICATION PHASE

When project applications are submitted, regulators should respond with timely decisions. Regulators should form an interdepartmental (intergovernmental) coordination team of the anticipated regulatory agencies and communicate clearly:

- a) What prompts the need for a project review (e.g., environmental and regulatory regarding "triggers");
- b) The nature of the review process (e.g., public review) including the "scope" (e.g., what will be included); and
- c) Expectations, including time frames.

Some key factors:

4. Make predictable and timely decisions

- Establish generic time frames for standard processes.
- Customize time frames once a project description (plan) is filed.
- Develop an interdepartmental (intergovernmental) coordination team to ensure consistent/timely decisions, to monitor established time frames, and to assess results.

5. Be clear and consistent about "triggers"

- Develop standard guidance on what factors will result in or "trigger" regulatory reviews.
- Ensure that the regulatory triggers are clearly communicated to both the proponent and the public.
- Be clear about the similarities and differences regarding federal and provincial triggers with a view to improving the regulatory working environment.

6. Be clear and consistent about the scope of regulatory reviews

- Identify the criteria that lead to a particular level of review.
- Develop standard guidance on what factors will affect the scope of reviews.
- Maintain and make public files that document factors that lead to a particular decision for the scope of a review.
- Ensure the "scope" is clearly communicated to the proponent and the public.

C. ENVIRONMENTAL ASSESSMENT/REGULATORY REVIEW PHASE

The environmental assessment and the regulatory review are components of a single merged phase, resulting from the collaborative relationships developed from the start of the pre-application phase. A single concurrent review of the environmental assessment/regulatory review components reduces overlap and duplication. Regulators conduct a review of the

environmental effects of the project, as well as a review of all other regulatory requirements of the project (including technical, social and economic). Information gaps are identified during this phase and requests for more detail are made. It is very important during this phase to ensure effective and efficient information exchange. Unnecessary requests or requests that result in duplication must be avoided.

Some key factors:

7. Minimize duplication and overlap

- Assess opportunities to substitute, merge or assess processes for equivalency when multiple processes apply.
- Identify gaps, duplication and overlap with the coordinating team, then ensure all bases are covered with the right amount of resources in the right places.
- Use common expertise, studies and reports to assess projects, resulting in a more streamlined, effective and efficient process.
- Examine opportunities to consolidate/link web sites and other forms of information sources and communications to proponents.

8. Requests for information must be clear, consistent and coordinated

- Establish clear guidance on what is required to be provided in a standard application, permit and authorization process.
- Establish a coordination process to ensure multiple information requests of a similar nature are grouped together.
- Ensure clarity in information requests by requiring those requesting or consolidating information to formulate their questions in a concise and specific manner.

9. Keep the volume of regulatory requirements manageable

- Ensure that the environmental assessment/regulatory review proceeds within the intended and appropriate scope.
- Ensure that the information being requested is directly required by the regulator to make the decision.
- Consider if the permitting process can be used to develop the detailed mitigation requirements of an impact rather than spending time and money to examine it in the environmental assessment phase.

D. PERMITTING/MONITORING AND ENFORCEMENT PHASE

Following the regulatory review, permits are issued. Some regulatory permits are issued during the construction phase of the project. Typically, these would be for site-specific aspects of construction (e.g., stream crossing or diversion). Follow-up and monitoring programs are also conducted during this phase. Regulators and their field inspectors ensure that general conditions of the development approval and all detailed permit requirements are enforced.

Some key factors:

10. Anticipate requirements and develop a coordinated schedule

- Coordinate permitting with the construction schedule to the extent possible with project construction/operational managers.
- For construction phase permits, ensure that as much information as possible is gathered during the hearing phase.
- Identify site-specific areas of concern in advance, and confirm mutual understanding of regulatory constraints in relation to the specific site and operational environment.

11. Monitor and check results against objectives

- Develop, adequately resource, and implement monitoring and follow-up plans.
- Assess need for and collaborate in the development of “work around” solutions.
- Adjust the monitoring and enforcement process based on objectives and results as the project evolves over time.
- Ensure that environmental assessment/regulatory phase recommendations for monitoring and mitigation are followed through.

E. POST-CLOSURE REVIEW AND ASSESSMENT, AND PROJECT EVALUATION PHASE

Following the first four phases, regulators should conduct a review of those phases with the objective of improving regulatory efficiency and effectiveness. This should occur in light of the strategic legislative and policy framework, the environmental assessment/regulatory review process, the project monitoring and enforcement, and the post-closure review results.

Some key factors:

12. Review strategic policy framework and plans, and make/adjust policy decisions

- Conduct a post-closure review that includes an assessment of the environmental assessment/regulatory and permitting process, and the results.

- Meet with the interdepartmental (intergovernmental) coordination team to examine the effectiveness and efficiency of the regulatory process and identify areas for improvement.
- Discuss the outcomes and lessons learned with other regulators, proponents, Aboriginal groups and stakeholders, including the successes and areas for improvement.
- Collaborate with strategic planning and legislative/policy shops to adjust or make new policy and/or procedural decisions, and then implement changes in a timely way.

**IMPROVING THE ENVIRONMENT FOR INVESTMENT
IN THE ATLANTIC OFFSHORE PETROLEUM SECTOR**

PART I. THE ATLANTIC ENERGY ROUNDTABLE

Issue

The Atlantic Energy Roundtable (AER) was established as a forum for governments, offshore operators, supply and service companies, regulators and labour to work together on common issues for further development of the Atlantic offshore oil and gas industry.

Background

The AER was first convened in November 2002 and consisted of Ministers, regulatory chairs and industry CEOs.

First, the AER commissioned a study to measure regulatory efficiency for offshore development projects in competing jurisdictions (the United Kingdom, Norway, the United States and Australia). The time from application to approval in Canada compared to these jurisdictions for offshore petroleum projects was double or more. The study confirmed that improving regulatory efficiency would help strengthen the competitive position of the offshore petroleum industry in Newfoundland and Labrador and Nova Scotia.

The AER also identified a need to modernize regulations to make them more responsive to technological and best practice change. With respect to industrial opportunities, the AER identified a need to focus on research and development and on closer communication between operators and the supplier community.

With this as background, the AER organized a workshop of interested stakeholders for the identification of issues and potential solutions related to regulatory efficiency.

The Challenge

- To create a more coordinated and integrated regulatory approval and environmental assessment process for offshore petroleum development projects in the Nova Scotia and Newfoundland and Labrador offshore areas.
- To develop a single review process for the review of EA and regulatory requirements.
- To improve coordination and eliminate duplication with the objective of reducing the time required to review projects.

- To foster cooperation between the key government department and agencies in the review of project applications, to increase certainty and predictability for participants involved, and to set out principles and approaches to ensure the effective, coordinated and concurrent discharge of all legislated responsibilities.

The Solution

- Facilitate proponent readiness and awareness

A Memorandum of Understanding (MOU) between the key government departments and agencies was developed to ensure regulatory approval processes and environmental assessments for future offshore development projects are handled in a coordinated and concurrent manner. The MOU facilitated proponent readiness and awareness by specifically referencing the desirability of pre-application dialogue. This early dialogue between regulators and proponents served to improve the overall quality of the project application.

The MOU also enhanced coordination and early exchange of information. It referenced the new role of the Federal Environmental Assessment Coordinator (FEAC), who will be the principal point of contact for federal authorities and serve as a "single federal window" during the assessment process. The creation of a project coordination committee also helps keep all authorities in the loop.

- Minimize uncertainty, duplication and overlap

The MOU specifically committed the parties to a coordinated/collaborative regulatory review and environmental assessment process. This up-front agreement greatly enhanced the opportunities for conducting EA and regulatory review processes concurrently, either in parallel or in an integrated manner.

The MOU outlined how to coordinate the parallel regulatory review and Comprehensive Study processes, which are separate and distinct processes. The commitment was to coordinate and overlap in time to the maximum extent possible.

In addition to coordination commitments, there is a possibility in the MOU to allow for integrated regulatory review and Comprehensive Study. Although some aspects of this approach have been used before, the major departure from the past was an agreement on how the cooperation and coordination would happen concurrently rather than sequentially in advance of an actual application being received. In the past, the regulatory processes were established on a case-by-case basis and the concurrent/integrated approach had not been used.

- Make timely decisions

Following the workshop conducted in January 2004, an MOU drafting team with representation from each of the signatory parties was established, and within four months, consensus was achieved on draft MOUs for the Newfoundland and Labrador and Nova Scotia offshore areas.

The MOU itself makes the commitment to create project-specific time frames, and in the information released as part of the MOU, the government parties outlined expected time frames for the various processes.

The Collaborative Approach

The public should have the opportunity to review and comment on the draft MOUs.

When it comes to specific projects, the establishment of project coordination teams facilitates early exchange of information and coordination with representation from the parties responsible for administering the various processes that may apply to any given project.

If required, the joint review panel allows each party to fulfill its EA or regulatory review requirements through a single, independent and public joint review process. Elements of the joint panel single process can also be incorporated through an integrated Comprehensive Study review.

The regulators and key government departments need to identify the principal steps for EA and regulatory review processes to determine where efficiencies can be realized. They also need to model estimates for project review cycle times, based on open and effective pre-application dialogue, complete and adequate information from proponents, and well-understood project components and technology.

The Results

On May 14, 2004, the draft MOUs were released for public review for a period of 30 days, and the MOUs were finalized following a review of comments received.

On February 18, 2005, nearly a dozen federal and provincial agencies announced the creation of a more coordinated and integrated regulatory approval and environmental assessment process for offshore petroleum development projects in the Nova Scotia and Newfoundland and Labrador offshore areas. The new approach, an initiative of the AER, is outlined in two MOUs - one for Nova Scotia and one for Newfoundland and Labrador. The signatories include:

- Minister of the Environment for Canada
- Minister of Fisheries and Oceans Canada
- Minister of Transport Canada
- Minister of Natural Resources Canada
- Premier of Newfoundland and Labrador
- Newfoundland and Labrador Minister of Natural Resources
- Nova Scotia Minister of Energy
- Nova Scotia Minister of Environment and Labour
- Chair of the National Energy Board
- Chair and CEO of the Canada-Newfoundland and Labrador Offshore Petroleum Board
- CEO of the Canada-Nova Scotia Offshore Petroleum Board

Lessons Learned

A collaborative approach in the identification and potential solutions with all stakeholders is practical and effective.

Positive industry reaction validated the value of putting work into generic processes. By specifying the path it would face should an application come forward, industry is better able to manage its own internal approval/action processes in parallel, further reducing time lines between application and production.

An important next step to follow the signing of the MOUs would be the development of guidance documents to further enhance the predictability of the process.

IMPROVING THE ENVIRONMENT FOR INVESTMENT IN THE ATLANTIC OFFSHORE PETROLEUM SECTOR

PART II. DEEP PANUKE

Issue

Following the signing of an MOU to coordinate regulatory review and environmental assessment for offshore oil and gas projects in well-known areas with well-understood designs, the governments and industry waited for an application that would serve as a test run for the new model.

Background

In the summer of 2006, EnCana Corporation signed an agreement with the Government of Nova Scotia on royalties and benefits from its proposed Deep Panuke project. This agreement effectively laid the groundwork for government support for the project pursuant to a process that was outlined in the Province's Energy Strategy. Thus, the public interest underpinning for the project had been clearly established before the regulatory process began.

This project was the first to take place in the context of the February 2005 Atlantic Energy Roundtable (AER) Memorandum of Understanding on Effective, Coordinated and Concurrent Environmental Assessment and Regulatory Processes for Offshore Petroleum Development Projects in the Nova Scotia Offshore Area. The MOU allowed regulators to establish time frames in the very early stages of the Deep Panuke project, as it addresses the coordination of departments and agencies and identifies a process for the concurrent EA and regulatory review as a means of reducing cycle times.

The Challenge

Although the Deep Panuke project had previously undergone a Comprehensive Study environmental review, the project description as filed in 2006 was different in some design aspects and the new application would trigger both a regulatory review and another environmental assessment. The project was an ideal candidate for using the new integrated/coordinated review process.

The greatest challenge was to ensure that the agreement was implemented within the terms and the spirit of what the drafters and Ministers had conceptually agreed to several years previously.

The Solution

The Project Coordination Team was assembled by the lead regulator (CNSOPB). The parties reviewed the Project Description filed by EnCana. They advised that the project be kept upon a Comprehensive Study-level environmental assessment (rather than being referred to a Joint Panel Review) and the Minister of the Environment concurred (the track decision). This allowed the regulators (CNSOPB/NEB) to propose an integrated and concurrent process for both the EA and the regulatory review.

The Collaborative Approach

All potential regulatory and EA authorities agreed to fully implement the MOU. This commitment included the following areas:

- Cooperation and collaboration in planning and execution.
- Information-flow streamlining.
- Establishment of time targets once a proposal was received.
- Encouraging project proponents to problem-solve before making applications.

The Deep Panuke project was the first test of the MOU's objective of reducing the time from project development plan filing to final approval. The AER-commissioned study on application to approval cycle times noted many competing jurisdictions were able to complete this cycle in less than a year. The MOU process suggested a concurrent environmental assessment and regulatory review process would be able to match this if a project was in an area that had already seen development and the project proposed to use well-understood technology and best practices. Deep Panuke met this criteria as a natural gas project near an existing offshore gas project with a pipeline that was proposed to follow an existing corridor.

The time frames for the project were similar to those predicted:

- Project Regulatory and EA Submissions were made on November 9, 2006.
- EA report submitted to Minister of the Environment for Decision on July 27, 2007, while regulatory recommendations/decisions followed the next month.
- Government approval took place over a number of weeks in September with official announcement in early October, just under 11 months after application.
- Outcome: approval times were consistent with international competitors.

Lessons Learned

In addition to the obvious time savings by having a concurrent EA and regulatory review process, the Deep Panuke application of the MOU tested a number of other concepts, including the opportunity to have the regulator fully integrate the review and EA process (as opposed to

simply conducting separate but parallel processes), the need for up-front work, and the development of an efficient information request system.

After the project had been approved, regulators, governments and the proponents met to consider lessons learned:

- An efficient regulatory system needs adequate preparation by all parties.
- Good project decision-making needs complete applications.
- Improving regulatory efficiency saves time and money, but takes a lot of work.
- Stakeholders need help in preparing for a more efficient process.
- Governments must continue to modernize the regulatory environment (e.g., Frontier Offshore Regulatory Renewal Initiative).

EMERA BRUNSWICK PILOT PROCESS

ISSUE

The federal Minister of the Environment may approve under the *Canadian Environmental Assessment Act* a substitute process for an environmental assessment by a review panel. This may occur where the Minister is of the opinion that the process would be an appropriate substitute for assessing the environmental effects of projects under an Act of Parliament other than that followed by a federal authority (for example, that of the National Energy Board [NEB] or a body established under a land claims agreement).

BACKGROUND

In January 2006, Maritimes and Northeast Pipeline Management Ltd. submitted a project proposal to the Canadian Environmental Assessment Agency and the NEB for the proposed construction and operation of a 145-kilometre pipeline. This proposed pipeline would run between the Canaport liquefied natural gas facility at Mispic Point in Saint John, New Brunswick, and the international border near Saint Stephen, New Brunswick. The NEB, Fisheries and Oceans Canada, and Transport Canada are responsible authorities under the *Canadian Environmental Assessment Act* for environmental assessment.

In March 2006, the NEB, in consultation with the other responsible authorities, requested that the federal Minister of the Environment refer the assessment of the project to a review panel pursuant to Section 25 of the Act. The NEB further requested that the review panel process be conducted by the NEB under Section 43 – the substitution provision of the Act. The federal Minister of the Environment wrote to the Chairman of the NEB in May 2006, approving the request for substitution, subject to a number of conditions. In May 2006, Maritimes and Northeast Pipeline Management notified the NEB that Emera Brunswick Pipeline Company had taken over ownership of the project.

The NEB held public hearings on the project from November 6 to November 20, 2006, and the NEB Review Panel issued its report on April 11, 2007. The federal government's response to the NEB Review Panel's report was approved by the Governor in Council in May 2007. The responsible authorities then decided that they would exercise their powers as required for the project to proceed. The NEB issued a Certificate of Public Convenience and Necessity on June 11, 2007.

The Challenge

Environmental regulation can be extremely complex, involving a number of regulatory agencies at both the federal and provincial levels. The challenge is to consolidate and streamline the federal environmental assessment framework, and allow for a simplified, significantly shorter and more predictable environmental assessment and hearing process for large facility projects.

Perhaps most prominently recognized by all is that regulatory delay affects government and industry, albeit in different ways, and while regulatory improvements are in order, this does not equate to a lowering of the regulatory standard or promoting a less rigorous environmental protection standard.

The Solution

The solution is receiving approval from the Minister of the Environment to substitute the NEB's hearing process for the environmental assessment of the Emera Brunswick Pipeline application.

The substitution provided a more efficient and effective application of the environmental assessment process by avoiding duplication while ensuring the public had opportunities to present its views to the NEB panel.

The Collaborative Approach

When the Emera Brunswick Pipeline Company applied for authorization to construct and operate the proposed Brunswick Pipeline, the NEB hearing process was substituted for the process normally undertaken by the Canadian Environmental Assessment Agency. This step greatly facilitated the process for the parties involved and avoided duplication of effort by the NEB and the CEA Agency, both of which have a mandate to undertake environmental assessments.

The Results

The substitution initiative and an increased emphasis on cooperation resulted in an accelerated timeline for the Brunswick Pipeline. An accelerated timeline also results in cost efficiencies and may play a valuable role in encouraging future investment.

Lessons Learned

The Brunswick Pipeline pilot is the first application of the substitution provisions of the CEA Act since it was proclaimed in 1995. The substitution was undertaken on a pilot basis. Now that it has concluded, it is being evaluated in order to inform ongoing consideration of policy issues associated with substitution.

The evaluation will include a general account of the pilot substituted process, which will be developed through a fact-finding review of the NEB proceedings. This stage is being performed by the CEA Agency with the cooperation of the NEB. The review will be based on public documents related to the substituted process that exist within the public domain and other NEB documents related to the project and NEB procedures.

The evaluation will also include a survey, through structured interviews, of interested parties who participated in the substitution. These participants either made oral statements, submitted written comments, or acted as interveners in the public hearing, and include stakeholders and Aboriginal parties, among others. The results of these interviews will be used as a supplement to the fact-finding information where appropriate.

The interviews will explore such matters as whether interested parties had access to the appropriate information to help them understand the project and its potential impacts, whether in their view there was an opportunity for meaningful participation in the process, whether the means and requirements of participation were clear and understood, and whether they believe that the issues of concern to them were well considered as part of the process.

A third-party external contractor may be used to conduct structured interviews using questions developed in consultation with the CEA Agency. The results of the survey will be analyzed by the CEA Agency.

A survey of federal government environmental assessment and regulatory authorities will also be undertaken. The purpose of this element will be to determine facts associated with the participation of federal authorities in the substituted process.

The CEA Agency will produce a report setting out the results of the evaluation and considerations with regard to the potential future application of substitution provisions by the federal Minister of the Environment.

The report is expected to be posted on the CEA Agency's Internet site in mid-2008.

INFORMATION MANAGEMENT SYSTEM - SASKATCHEWAN

ISSUE

Thousands of individual projects at the exploration stage of petroleum and mineral development can cause both industry and government substantial workload in making applications for, and authorizations of, exploratory drill holes.

BACKGROUND

The Situation

This case study is based on a talk given by an EnCana geologist at a geomatics conference held in Regina in 2002. EnCana wished to drill about 30 holes in the North Battleford area of Saskatchewan. Gathering the information necessary to fill in the government application forms for the drill licences and associated permits involved contacting 12 government ministries and agencies and compiling 54 digital data sets in eight different program types that, in turn, were using five different geographic reference systems, and digitizing five data sets not yet in electronic formats. All the information was available to answer the questions on the Saskatchewan Ministry forms, but it took three months for EnCana to compile it. Once completed and the forms submitted to government, it took the government less than 10 days to issue the drill licences.

This case study is typical of thousands of individual projects that are regulated at the exploration stage of petroleum and mineral exploration. For background, between 4000 and 5000 petroleum holes are drilled annually in Saskatchewan; each requires a drill licence. Volumetrically, the issuing of drill licences and associated permits is one of the highest workloads that government agencies face. Staff time associated with these processes is at least twice that associated with major project reviews.

The Challenge

Often the time to prepare an application is longer than the the time it takes government to process the permit or licence. This can be due to a number of reasons, but key among them is the complexity of locating existing government information and being able to compile it.

Government agencies often measure how long it takes to regulate in a different way from industry. The ministries' measure, in this case, was 10 days (e.g., the time from receiving the

application to approving it). Industry's measure is from the decision to apply to receiving the permit or, in this case, three months plus 10 days later.

The Solution

Improving the regulatory system should include a holistic analysis of the application system, not just the internal government regulatory portion of the system. To achieve a 50% improvement in regulatory efficiency: improved access to information could save the industry six weeks, while improving internal government regulatory efficiency saves only five days.

The Results

Saskatchewan is developing an electronic management information system that will allow clients to access all available government information and use it to apply for permits and licences online. This consists of three main components: a common geographical base, a common data format (or known format), and a way of linking data and the permitting system.

Ensuring a common base for all geographic information:

- Saskatchewan ministries will all use the same geographic base maps, specifically NAD 83.
- Currently, Saskatchewan uses a township fabric in the south and a UTM grid in the north. The ministries agreed to convert to the projected township grid in the north, resulting in the same grid being used throughout the province.
- Base maps will be made available free of charge while older base map systems will be charged for.

Ensuring data have a common or at least a known format that is easily accessible:

- The Saskatchewan Geological Atlas links approximately 50 individual databases associated with geology and government mineral ownership data.
- Through a program designed to facilitate the transfer of information during emergencies, a standard data format was developed and most existing database formats were documented.
- A central access point (Geoportal) will link several hundred data sets through a map-based interface, in effect eliminating the requirement to compile the data. Construction will be completed in September 2008.
- Digitizing some critical data sets including mineral ownership, replacing topographic maps with 2-metre satellite imagery, and digitizing heritage information has been completed or is in progress.

Linking licensing and information systems:

- The Mineral Administration Registration System (MARS) is an online staking system that allows a client to obtain mineral title through the web by bringing together all the information required to select an area of crown minerals and apply for the title. This system will be constructed by March 2009.
- The Crown Land Administration and Management System (CLAMS) will expand the concept of linking application systems to data systems for over 100 permit types potentially including bonus bids for petroleum, seismic permits, work permits, petroleum surface leases, etc. The individual permits will be added through 2010 and 2011.

The information management system links strongly to the Biz-Pal project, which provides the knowledge of what applications are required and Guideline documents such as the *Best Practice Guidelines for Mineral Exploration*.

Lessons Learned

If clients have the information to evaluate the project themselves, companies will tend to make the same decisions as government, for example, selecting the most environmentally sensitive access routes for drill sites. The short turn-around time for government for the EnCana case was a direct reflection of industry using the same data sets as government to make their application.