

2.0 REGULATORY REGIME

There is currently no regulatory process in place in British Columbia with the specific mandate to review and approve offshore oil or gas exploration or production activities. The Oil and Gas Commission, and the British Columbia Environmental Assessment Office are the existing provincial regulatory bodies that address oil and gas activities and environmental approval processes in the province. The Oil and Gas Commission and the BC environmental assessment process are described below. The review and approval processes for the oil and gas industry in the Atlantic provinces are also described. Numerous other pieces of provincial and federal legislation that are not within the scope of this update, such as the provincial *Waste Management Act* and the federal *Transportation of Dangerous Goods Act*, would also apply to various activities undertaken in the development and operation of an offshore oil and gas industry.

2.1 Oil and Gas Commission

The Oil and Gas Commission (OGC) is the Province of British Columbia's crown corporation responsible for regulating most aspects of the upstream oil and gas industry in the province, including



crude oil, natural gas and pipeline activities. The OGC is a relatively new body, established by enactment of the *Oil and Gas Commission Act* in June 1998. It assumes most of the oil and gas regulatory responsibilities formerly held by the Ministries of Energy and Mines, Forests, and Environment, Lands and Parks. An integral part of the OGC's regulatory responsibility evolves from the *Petroleum and Natural Gas Act* and the *Pipelines Act*, and affiliated regulations. As all oil and gas exploration and production in BC to date has been land-based, none of the OGC processes have been tailored toward work in a marine environment.

The OGC is based in Fort St. John and also has offices in Victoria and Fort Nelson. The Commission is made up of 7 branches: Commissioner's Office; Applications and Approvals; Aboriginal Relations and Land Use; Corporate Services; Compliance and Enforcement; Engineering and Geology; and Legislation, Policy and Special Projects. The OGC's mandate is to provide efficient processes for the review of applications related to the oil and gas sector (*i.e.* well and road development, geophysical exploration activity, pipeline and facilities), ensuring that decisions are made in the public interest and having regard for environmental, economic and social impacts. More specifically, the OGC's mandate is to assist development of the oil and gas industry by streamlining the applications and approval processes while maintaining provincial environmental standards. Section 3 of the *Oil and Gas Commission Act* states that the purposes of the OGC are to:

- a) regulate oil and gas activities and pipelines in British Columbia in a manner that
 - i) provides for the sound development of the oil and gas sector, by fostering a healthy environment, a sound economy and social well being,
 - ii) conserves oil and gas resources in British Columbia,
 - iii) ensures safe and efficient practices, and
 - iv) assists owners of oil and gas resources to participate equitably in the production of shared pools of oil and gas;
- b) provide for effective and efficient processes for the review of applications related to oil and gas activities or pipelines, and to ensure that applications that are approved are in the public interest having regard to environmental, economic and social effects;
- (c) encourage the participation of First Nations and aboriginal peoples in processes affecting them;
- (d) participate in planning processes; and
- (e) undertake programs of education and communication in order to advance safe and efficient practices and the other purposes of the Commission.

To support the development permit application process, the OGC has developed a number of checklists to ensure proponent's applications are complete and entered into a Memorandum of Understanding (MOU) with the Treaty 8 First Nations having Traditional Territories in the Peace River basin (West Moberly, Sauleau, Prophet River, Fort Nelson, Halfway, Blueberry, Doig, and Dené Tha'). This MOU clearly outlines the approval process with respect to First Nations review of the application, process for identification of potential Treaty Rights infringement(s) and timing. In addition, approximately 60 approval application checklists have been prepared for most activities requiring approval such as: public



consultation; geophysical - crown and private land; wells - crown, private, and agricultural lease; roads; pipelines - crown and private land; powerlines; quarries; airstrips; on-lease and off-lease facilities; and others.

Applications for well, geophysical and pipeline projects must assess project effects on the environment (forest, land and habitat), First Nations and archaeology issues in the application. Further, all applications to the OGC are required to assess the need for public consultation and ensure that a consultation process commensurate with the project scope is undertaken. This consultation process must include all stakeholders potentially impacted by an application, including First Nations. The application forms for specific development (geophysical, well and pipeline) contains a section for public consultation and requires the applicant to provide a record of all consultation conducted. This includes documentation of parties consulted, means of contact, dates, notes, issues raised, how those issues were addressed and if there are any outstanding or unresolved concerns. As part of the Pre-Application review process, the OGC assesses the consultation process and the Aboriginal Affairs, Policy and Land Use Branch specifically reviews the Application and consultation with respect to potential Treaty Rights infringement for Treaty 8 First Nations.

To speed the screening process, the OGC has developed an application sorting function based on the complexity of the project. The process involves the division of applications into Simple, Normal, or Complex categories. This screening process limits application routing to only the required reviews. The streamlined review process also gives proponents a more accurate estimate of the processing time required for each application. Factors considered by the OGC for classification of an application for geophysical activities, wells and pipelines are outlined in Table 2.1. If the application is complete and all issues have been addressed to the satisfaction of the OGC, approval is granted through a single approval document.

2.2 British Columbia Environmental Assessment Process

The environmental approval process for large projects in British Columbia is regulated through the British Columbia Environmental Assessment Office (BCEAO). All projects that are considered a reviewable project pursuant to the *Reviewable Projects Regulation* of the British Columbia *Environmental Assessment Act (BCEAA)* must obtain an approval through the environmental assessment review process. The *BCEAA* process features a multi-staged project review. Depending on the resolution of environmental issues, the review may require up to three stages: Stage 1 – Application; Stage 2 – Project Report; Stage 3 – Public Hearing. A project may be approved after any of these stages. The test of whether a project moves to the next Stage is whether or not all environmental issues have been sufficiently resolved. To date, no review has progressed to Stage 3.



Table 2.1 OGC Applications Identification Table

	GEOPHYSICAL	WELLS	PIPELINES
SIMPLE*	<p><u>PRIVATE:</u> Geophysical Program on private land or agricultural lease that includes the following: No stream crossings to be crossed with mechanical equipment. No crown timber. All road use permits in place. <i>Archaeological overview assessment (pre-application) is completed with no recommendation for an Archeological Impact Assessment or application is in an accepted area of very low potential.</i></p> <p><u>CROWN:</u> Geophysical Program on crown land</p> <p><i>Note: An application that does not require Aboriginal consultation, an "Application Pre-Assessment" form must be completed and signed off by the Director of Aboriginal Affairs and Land Use.</i> No cutting permit required. Existing access. Not in special management areas. No stream crossings to be crossed with mechanical equipment. All road use permits in place. No range tenures impacted or agreements already in place. Minimal public/stakeholder impact or detailed public consultation completed as outlined in the Oil and Gas Activity Public Consultation Policy and Guidelines and issues effectively mitigated.</p>	<p><u>PRIVATE:</u> Well (and access) on private land or agricultural lease that includes the following: Sweet gas objective (i.e. Bluesky, Gething, Jean Marie formations) Land owner (leaseholder) agreement(s) submitted. <i>Archaeological overview assessment (pre-application) completed or application is in an accepted area of very low potential.</i> Minimal public/stakeholder impact or detailed public consultation completed as outlined in the Oil and Gas Activity Public Consultation Policy and Guidelines No stream crossings. No crown timber. Road use permits in place. Schedule A pre-site assessment submitted.</p> <p><u>CROWN:</u> Well on crown land: <i>Note: An application that does not require Aboriginal consultation, an "Application Pre-Assessment" form must be completed and signed off by the Director of Aboriginal Affairs and Land Use.</i> No cutting permit required. Sweet gas objective (i.e. Bluesky, Gething, Jean Marie formations) Minimal public/stakeholder impact or detailed public consultation completed as outlined in the Oil and Gas Activity Public Consultation Policy and Guidelines and issues effectively mitigated. Not in special management areas No stream crossings. No range tenures impacted or agreements already in place. Schedule A pre-site assessment submitted. No Certificate of Restoration on existing site</p>	<p><u>PRIVATE:</u> Pipeline on private land. Land owner agreement(s) in place. <i>Archaeological overview assessment (pre-application) completed or application is in an accepted area of very low potential.</i> No crown timber. Road use permits in place. No stream crossings</p> <p><u>CROWN:</u> Pipeline on crown land: <i>Where low infringement has been identified, as reviewed and approved by Aboriginal Affairs and Land Use Policy Branch.</i> Within existing well site Rights of Ways or Licenses of Occupation. Wholly within an existing pipeline Right of Way with no stream crossings or no crown timber removal. Minimal public/stakeholder impact or detailed public consultation completed as outlined in the Oil and Gas Activity Public Consultation Policy and Guidelines and issues effectively mitigated.</p>



	GEOPHYSICAL	WELLS	PIPELINES
AMENDMENTS	<p>Minor Amendments: Helipads for functionality as per Ministry of Forests and WCB guidelines. <i>Note: An application that does not require Aboriginal consultation, an "Application Pre-Assessment" form must be completed and signed off by the Director of Aboriginal Affairs and Land Use.</i> Minimal public/stakeholder impact or detailed public consultation completed as outlined in the Oil and Gas Activity Public Consultation Policy and Guidelines and issues effectively mitigated. No major issues identified in review of original application. Private land with no major issues identified on original application.</p>	<p>Minor Amendments-Wells: addition of borrow pits, decking sites, remote sumps, workspaces, minor access changes. <i>Note: An application that does not require Aboriginal consultation, an "Application Pre-Assessment" form must be completed and signed off by the Director of Aboriginal Affairs and Land Use.</i> Minimal public/stakeholder impact or detailed public consultation completed as outlined in the Oil and Gas Activity Public Consultation Policy and Guidelines and issues effectively mitigated. No major issues identified in review of original application.</p>	<p>Minor Amendments-Pipelines: addition or relocation of borrow pits or temporary workspaces. <i>Note: An application that does not require Aboriginal consultation, an "Application Pre-Assessment" form must be completed and signed off by the Director of Aboriginal Affairs and Land Use.</i> Minimal public/stakeholder impact or detailed public consultation completed as outlined in the Oil and Gas Activity Public Consultation Policy and Guidelines and issues effectively mitigated. No major issues identified in review of original application.</p>
NORMAL*	All applications that are not described in the simple or complex categories.	All applications that are not described in the simple or complex categories.	All applications that are not described in the simple or complex categories.
COMPLEX*	<p>Any applications that are: Proposed in environmentally sensitive area as identified in the Land and Resource Management Plan as a Special Management Zones, adjacent to, or crossing major fish bearing streams. <i>Projects that are identified as having a medium or high probability of infringement on First Nation Treaty Rights. (as outlined in the MOU'S signed by the member First Nations of Treaty 8 and the Province of BC)</i> <i>Archaeological pre-impact assessment required, and not completed prior to the application submission.</i> Applications located outside North Eastern BC (Fort Nelson, Fort St. John, Dawson Creek) MOF Districts 3D Applications</p>	<p>Any applications that are: Proposed in environmentally sensitive area as identified in the Land and Resource Management Plan as a Special Management Zones, adjacent to, or crossing major fish bearing streams. Special sour wells. <i>Projects that are identified as having a medium or high probability of infringement on First Nation Treaty Rights. (as outlined in the MOU'S signed by the member First Nations of Treaty 8 and the Province of BC)</i> <i>Archaeological pre-impact assessment required, and not completed prior to the application submission.</i> Applications located outside North Eastern BC (Fort Nelson, Fort St. John, Dawson Creek) MOF Districts Well and access proposed for summer construction in traditional winter access areas</p>	<p>Any applications that are: Proposed in environmentally sensitive area as identified in the Land and Resource Management Plan as a Special Management Zones, adjacent to, or crossing major fish bearing streams. <i>Projects that are identified as having a medium or high probability of infringement on First Nation Treaty Rights. (as outlined in the MOU'S signed by the member First Nations of Treaty 8 and the Province of BC)</i> <i>Archaeological pre-impact assessment required, and not completed prior to the application submission.</i> Applications located outside North Eastern BC (Fort Nelson, Fort St. John, Dawson Creek) MOF Districts</p>

* Criteria may be changed at the discretion of the Director



Another feature of *BCEAA* is specific timelines for project reviews. The schedule assumes that the BCEAO, the Project Committee, the Ministers and regulators take the maximum allowable time for each step in the review process permitted under *BCEAA*. There remains some potential, therefore, to reduce the overall duration of the regulatory approval process if the parties involved do not use their maximum allowable time to review the Application.

A Stage 1 Application to the BCEAO must contain all of the following information upon submission before it will be accepted for review:

- a description of the purpose and major components of the project;
- existing information pertaining to environmental, social, economic, cultural, heritage and health characteristics and conditions in the vicinity of the project;
- on and off site facilities associated with the project;
- the construction plan for the project and a timetable for the completion of construction;
- any new or expanded public works or undertakings that will be required because of the project;
- potential effects of the project;
- the measures that the proponent proposes in order to prevent or mitigate adverse effects;
- any relevant plans pertaining to land use and to related resource issues in the area of the project that are authorized under an enactment;
- public information distribution activities and consultation activities undertaken by the proponent and a summary of the public response and of the issues identified;
- any program of public information distribution or consultation proposed by the proponent during the next stages of project planning and review;
- information distribution activities and consultation undertaken by the proponent with a First Nation and a summary of the First Nation's response and of the issues identified;
- any program of information distribution or consultation proposed by the proponent with a First Nation during the next stages of project planning and review;
- any discussions undertaken by the proponent about the effects of the project, with ministries or agencies of the government of British Columbia, with departments or agencies of the government of Canada, with municipalities or regional districts or with British Columbia's neighbouring jurisdictions; and
- the issues identified in the discussion referred to in the previous point.

Within seven (7) days of the submission of the Application, the Executive Director screens and accepts the Application for review. Once the Application is accepted by the BCEAO, the Executive Director establishes a Project Committee to review the proposed project and provide recommendations. The Project Committee can include representatives from the following agencies:

- the government of British Columbia;
- the government of Canada;
- any municipality or regional district in the vicinity of the project or in which the project is located;



- any First Nation whose traditional territory includes the site of the project or is in the vicinity of the project; and
- any of British Columbia's neighbouring jurisdictions in the vicinity of the project.

After the Application is accepted for review, the Project Committee will specify the length of the review period of the Application (30-75 days). At the same time, the Executive Director must advertise a public notice of the proposed project, soliciting comments from the public and other agencies in the British Columbia government and the federal government within the review time frame of the Project Committee. In addition, a copy of the Application is placed on the Project Registry for referral purposes.

The Project Committee provides comments and recommendations regarding the Application and the comments received from the public within 40 days of the completion of the Application review period. Upon the receipt and review of the Project Committee's recommendations, the Executive Director will either request a Stage 2 review of the proposed project (a Project Report), or will forward the Application and Project Committee comments to the ministers for a decision, to be made within 30 days. Once the Application is approved by the ministers, a project approval certificate is issued and the project may proceed.

2.2.1 Concurrent Regulatory Approvals

At any time after the acceptance of the Application for review by the Executive Director and the Project Committee, the proponent may request that concurrent consideration be given to the approval of permits and licenses directly related to the proposed project. The proponent must submit a formal notice to the Executive Director requesting that applications for licenses and permits be reviewed concurrently with the Application.

Concurrent regulatory approvals could lead to expeditious approvals on proposed projects. Where a proponent requests concurrent review of other approvals, the Project Committee coordinates this review with the review of the Application. The appropriate regulatory agencies will proceed with processing the applications for specified licenses and permits related to the proposed project, following their normal procedures. However, this processing must be completed within the specified review period for the Application. The specific permits requested, if approved, will be issued with 30 days of BCEAA certification.

Applications for permits and licenses may need to incorporate detailed, and possibly final, engineering design information. The ability to process concurrent approvals will depend upon the proponent providing the necessary information in adequate detail.

2.2.2 Public Consultation

Prior to the submission of the Application to the BCEAO, the proponent is expected to begin



consultation with the public. Consultation at the pre-Application stage should focus on initial scoping of public interests and concerns, as the proponent becomes familiar with key stakeholders who will need to be consulted on an ongoing basis. Information sessions for the public should be advertised and held during the pre-Application stage. A comprehensive public consultation program will ensure environmental issues are identified early and can be dealt with effectively in the Application.

The Application should include documentation and a summary of all public consultation activities prior to the submission of the Application. An up-to-date mailing list of all agency/public contacts and the addresses of neighbouring landowners and businesses should be included in the Application. In addition, the proponent must include a description of plans for future consultation activities and their timing during the Application review stage.

Once the Application has been submitted and accepted by the Executive Director of the BCEAO, the public must be formally notified of the availability of the Application for review. The Executive Director is required to advertise a notice of the availability of the Application and to invite public comments during the specified Application review time period. The proponent is also required to advertise a notice about the availability of the Application for comment, and to carry out any public consultation plans outlined in the Application document during the specified review period.

Following the review of the Application and the submission of comments from the public, the proponent will be provided with the comments submitted to the BCEAO and will have a brief opportunity to provide a written reply. The proponent is required to respond to the public comments in a timely manner so that the Project Committee can take these responses into consideration within the time allotted to make recommendations to the Executive Director.

In general, the costs of Application distribution, advertisement, or public consultation will be the responsibility of the proponent.

2.2.3 Federal Environmental Impact Assessment

An environmental assessment pursuant to the *Canadian Environmental Assessment Act (CEAA)* may be triggered if the proposed project involves the federal government in any of the following ways:

- the proponent is an agent of the federal government;
- the federal government provides funding for the proposed project;
- the proposed project requires leasing or buying land from the federal government; or
- the proposed project requires a permit or a license from a federal authority.

In the case that a federal environmental assessment is triggered, the Province of British Columbia and the federal government have negotiated a bilateral agreement to harmonize requirements for environmental assessments under both processes. The purpose of this bilateral agreement is to provide a streamlined approach to federal-provincial environmental assessments and to reduce costly delays in



project approval and repetition of environmental assessment information submitted to regulatory agencies. In order to achieve this "one project - one assessment" objective, federal agencies will designate the process of screening or comprehensive study under the *Canadian Environmental Assessment Act* to the provincial Environmental Assessment Office. At the conclusion of the environmental assessment, both governments will make their respective decisions. In this manner, each government retains its decision-making role, but the two decisions are made on the basis of information gathered and analyzed through a single process.

2.3 Atlantic Canada

The approvals process for offshore oil and gas exploration in Atlantic Canada is regulated through the Canada-Nova Scotia Offshore Petroleum Board (C-NSOPB), the Canada-Newfoundland Offshore Petroleum Board (C-NOPB), the National Energy Board (NEB), and/or provisions of the *Canadian Environmental Assessment Act*. Development in most of offshore Nova Scotia is subject to the provisions of the *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act* and the *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation (Nova Scotia) Act* (the Accord Acts). Development in offshore Newfoundland is subject to the provisions of the *Canada-Newfoundland Atlantic Accord Implementation Act* and the *Canada-Newfoundland Atlantic Accord Implementation (Newfoundland) Act* (the Accord Acts). The Acts and their regulations and guidelines are found on the C-NSOPB and C-NOPB websites. The information in this section is from the Acts and their regulations and the Nova Scotia and Newfoundland reports in The Regulatory Roadmaps Projects compiled by the Atlantic Canada Petroleum Institute (ACPI) (ACPI and Erlandson & Associates 2001a; 2001b) and from the recently completed White Rose Oilfield Comprehensive Study (Husky Oil 2000).

2.3.1 Roles of the Boards

The C-NSOPB and C-NOPB are independent joint agencies representing the Government of Canada and the Governments of Nova Scotia and Newfoundland and Labrador, respectively, and are responsible for management of the hydrocarbon resources (including regulation and safe practices) in the Nova Scotia and Newfoundland offshore areas pursuant to the Accords Acts. The C-NSOPB was established in 1987; the C-NOPB in 1985. In carrying out their mandates, the Boards operate autonomously in making their decisions, other than those described in the Accords Acts as "fundamental decisions", which are subject to the approval of the federal and provincial energy ministers. The Boards continuously monitor the activities of offshore operators in the areas of safety, environmental protection, resource management, and industrial benefits (as per the provisions of the Accord Acts as they relate to providing full and fair opportunity to workers and companies in Canada, and particularly in Nova Scotia and Newfoundland and Labrador, to participate in the supply of goods and services used in the offshore activity).

The C-NSOPB's principal responsibilities include (C-NSOPB website):

- ensuring the safe conduct of offshore operations;



- protection of the environment during offshore petroleum activities;
- management of offshore oil and gas resources;
- review of industrial benefits and employment opportunities;
- issuance of licenses for offshore exploration and development; and
- resource evaluation, data collection and distribution.

The C-NOPB's responsibilities include (C-NOPB website):

- the sale of interest in lands;
- the issuing of exploration licenses;
- approvals and authorizations pertaining to exploration activities;
- the declaration of Significant and Commercial discoveries;
- the issuing of production licenses;
- decisions relating to the commencement, continuation, and suspension of drilling and production;
- the administration of regulations; and
- the exercise of emergency powers pertaining to safety, environmental protection, and resource conservation.

In fulfilling these roles, the C-NSOPB/C-NOPB will often place conditions upon a development as they relate to environmental protection (requiring an environmental protection plan for each phase of a project), environmental monitoring (conducting environmental effects monitoring to validate the potential effects predictions made in environmental assessment reports), and worker safety (requirements for safety plans, conducting concept safety analyses). In addition to placing conditions on planning processes, the C-NSOPB/C-NOPB will also often require commitments/place conditions upon the design of the project (e.g., requiring specific safety design considerations be included, such as double-hulled vessels for operating in waters with pack ice and icebergs).

The C-NSOPB/C-NOPB also provide regulatory advice/direction on guidelines, such as the Offshore Chemical Selection Guidelines or the Offshore Waste Treatment Guidelines. These latter guidelines, developed in 1996 by both the C-NSOPB and C-NOPB in conjunction with the National Energy Board (NEB), are currently under review and the two provincial Boards enforcement of these Guidelines can vary. For example, an important issue is the disposal of drill cuttings (refer to Section 6.1.3.1), and whether or not they can be discharged over the side. The current (1996) Offshore Waste Treatment Guidelines sets a 15 percent retention of oil on cuttings (15 g/100 g or less of dry solids) for treated drill cuttings disposed over the side. The C-NSOPB currently holds with the North Sea model of allowing 1 percent oil retained on cuttings for drill cuttings to be disposed over the side (this limit has been in effect since January 1, 2000 (C-NSOPB Policy on Discharge of Oil-Based Muds)). As this limit is not possible to meet under current best available technology, developments must re-inject cuttings back into the field, or ship cuttings to shore for approved disposal. The C-NSOPB has recently allowed exemptions to the 1 percent limit for several exploration drilling projects to the USEPA limit of 6.9



percent wet weight on cuttings if the proponent accomplishes it using a demonstration technology. The C-NOPB, while currently allowing over the side discharge at the 15 percent limit (they issued an Amendment to the Offshore Waste Treatment Guidelines on the “Use of Synthetic Based Drilling Mud in the Offshore Newfoundland Area”), is reviewing reducing the limit to 8 percent, which is theoretically possible with best available technology.

2.3.2 Development Application Process

2.3.2.1 Project Approval

The Accord Acts are very similar, as are the development regulations, approvals and authorizations. Both Accord Acts will be discussed in tandem, with any significant differences indicated.

The Accord Acts require that prior to production from a pool or field, the operator of the pool or field must hold a valid production license and that an approved Development Plan be in place. Approval of the Development Plan includes consideration of matters relating to the safety of operations, protection of the environment, and conservation of the petroleum resource. Approval of a Canada-Nova Scotia Industrial Benefits and Employment Plan or Canada-Newfoundland Benefits Plan (Benefits Plans) is a statutory pre-condition to approval of the Development Plan.

Proponents who wish to develop a field in the Nova Scotia/Newfoundland offshore area make the C-NSOPB/C-NOPB aware of their intentions as early as possible by meeting with the C-NSOPB/C-NOPB to discuss the proposal. Subsequently, a proponent submits written notice and description of the proposed development to the C-NSOPB/C-NOPB. A proponent must then submit a Development Application (DA).

The following documents must be included with every DA:

- Development Plan;
- Canada-Nova Scotia Benefits Plan or Canada-Newfoundland Benefits Plan (depending on jurisdiction); and
- Development Application Summary.

The C-NSOPB/C-NOPB may also require one or more auxiliary documents including:

- Environmental Impact Statement (EIS) (including a Socio-Economic Impact Statement (SEIS)) (Nova Scotia process) or separate EIS/SEIS documents (Newfoundland process).
- Generic Safety Plan (including a Concept Safety Analysis);
- Environmental Protection Plan; and
- any other documentation deemed necessary by the C-NSOPB/C-NOPB (these are referred to as Part



II documents and contain specific geotechnical and engineering data such as reservoir modelling – these can only be released to the public with permission from the proponent due to their proprietary nature).

A Development Plan provides the C-NSOPB/C-NOPB with a description of all phases of the proposed offshore hydrocarbon development process associated with the proposed project. It also provides sufficient information to enable the C-NSOPB/C-NOPB to conduct a public review of the proposed project activities, if it deems such a review to be necessary.

A Development Plan outlines the work that is to be done during all subsequent phases of the project, and the procedures that will be used in completing this work. Work Authorizations associated with the construction, installation and commissioning, production and abandonment phases of a project will not be granted until the applicant's Development Plan has received approval from the C-NSOPB/C-NOPB. The DA and its supporting documentation is also reviewed by the appropriate federal and provincial agencies.

Once the C-NSOPB/C-NOPB completes an adequacy review of the DA (and reviews any required DA Supplemental Report), the DA is provided to a Public Review Commission (or panel). The Commission reviews the DA and holds a public review of the DA and may request additional information based on Commission review and comments received from public. The Additional Information Document is also reviewed by the Commission and made available to the public. The Commission then posts a Public Notice of Agenda of Public Hearings, 30 days in advance of initiating public hearings (which can last one to three weeks). At the completion of the hearings, the Commission prepares a Recommendation Report to C-NSOPB/C-NOPB, which in turn prepares a Decision Report (which will include both the Commission's recommendations and the C-NSOPB's/C-NOPB's Conditions of Approval).

2.3.2.2 Development Approval

Once the C-NSOPB/C-NOPB has fulfilled their role in the project approvals process, their primary mandate is to oversee the operation and safety of the developments. There are several Regulations and Guidelines which oversee the way a development proceeds, including:

- *Nova Scotia Offshore Area Petroleum Geophysical Operation Regulations/Newfoundland Offshore Area Petroleum Geophysical Operations Regulations;*
- *Nova Scotia Certificate of Fitness Regulations/Newfoundland Offshore Certificate of Fitness Regulations;*
- *Nova Scotia Offshore Area Petroleum Diving Regulations/Newfoundland Offshore Area Petroleum Diving Regulations;*
- *Nova Scotia Offshore Area Petroleum Production and Conservation Regulations/Newfoundland Offshore Area Petroleum Production and Conservation Regulations;*
- *Nova Scotia Offshore Petroleum Drilling Regulations/Newfoundland Offshore Petroleum Drilling*



Regulations;

- *Nova Scotia Offshore Petroleum Installations Regulations/Newfoundland Offshore Petroleum Installations Regulations;*
- *Regulations Respecting Oil and Gas Operations in the Nova Scotia Offshore Area/Newfoundland Offshore Area Oil and Gas Operations Regulations;*
- *Canada-Nova Scotia Oil and Gas Spills and Debris Liability Requirements Regulations/Canada-Newfoundland Oil and Gas Spills and Debris Liability Regulations;*
- *Newfoundland Offshore Area Registration Regulations (Newfoundland only);*
- *Hibernia Offshore Development Project Offshore Applications Regulations (Newfoundland only);*
- *Hibernia Development Project Act (Newfoundland only);*
- *Guidelines Respecting Drilling Programs in the Nova Scotia Offshore Area/Guidelines Respecting Drilling Programs in the Newfoundland Offshore Area;*
- *Guidelines Respecting Financial Responsibility Requirements for Work or Activity in the Newfoundland and Nova Scotia Offshore areas;*
- *Offshore Chemical selection Guidelines;*
- *CNSOPB/CNOPB Joint Guideline-Data Acquisition and Reporting for Well, Pool and Field Evaluations;*
- *Offshore Waste Treatment Guidelines (joint C-NOPB/C-NSOPB and NEB 1996 report, currently under review);*
- *Guidelines for Plans and Authorizations Required for Development Projects (C-NSOPB)/Development Application Guidelines (C-NOPB);*
- *Operator's Safety Plan (C-NSOPB)/Safety Plan Guidelines (C-NOPB);*
- *Geophysical and Geological Programs in the Nova Scotia Offshore Area-Guidelines for Work Programs, Authorizations and Reports/Geophysical, Geological, Environmental and Geotechnical Program Guidelines (C-NOPB);*
- *Industrial Benefits and Employment Plan - Nova Scotia Offshore Area (C-NSOPB);*
- *Respecting Physical Environment Programs during Petroleum Drilling and Production Activities on Frontier Lands (C-NSOPB);*
- *Issuance of Exploration Licenses (C-NSOPB);*
- *Guidelines Respecting Monthly Production Reporting for Producing Fields in the Newfoundland Offshore Area (C-NOPB);*
- *The Newfoundland Offshore Area Registration System Guidelines (C-NOPB);*
- *Newfoundland Offshore Area Guidelines for Drilling Equipment (C-NOPB); and*
- *Field Evaluations in the Newfoundland Offshore Area (C-NOPB).*

Offshore development also requires the following approvals from the C-NSOPB/C-NOPB:

- *Geotechnical/Engineering/Environmental Program Authorization;*
- *Declaration of Commercial Discovery;*



- Production License;
- Operating License;
- Authorization to Install Production Installation;
- Drilling Program Authorization;
- Certificate of Fitness issued by a Certifying Authority and required by the
 - drilling unit prior to the issuance of a Drilling Program Authorization,
 - diving program prior to the issuance of a Diving Program Authorization,
 - production facility prior to the issuance of a Production Operations Authorization;
- Approval to Drill a Well;
- Production Operations Authorization;
- Diving Program Authorization; and
- Abandonment Program Authorization.

An offshore development would also be required to provide monthly accident statistics and well termination records, and applications for any variance from issued permits.

Other applicable regulations include the *Petroleum Occupational Safety and Health Regulations* (NS, Draft 1990)/Draft *Newfoundland Petroleum Occupational Safety and Health (OSH) Regulations* and the *Canada Oil and Gas Operations Regulation*.

2.3.3 Joint Offshore Board/Canadian Environmental Assessment Act Process

2.3.3.1 Project Approval

The development of offshore oil and gas projects is subject to the *Canadian Environmental Assessment Act (CEAA)*.

Responsible Authorities

C-NSOPB/C-NOPB

In Atlantic Canada, the C-NOPB must issue a production license respecting the project, and thereby performs a duty relating to “the administration of federal lands and...disposes of those lands or any interest in those land...for the purpose of enabling the project to be carried out” within the meaning of paragraph 5(1)(c) of *CEAA*. The C-NOPB, therefore, requires an environmental assessment under *CEAA*, and is a “Responsible Authority” respecting the project. It is not clear whether the land trigger applies under C-NSOPB’s jurisdiction. In the absence of a Board which represents the federal and provincial government, it is most likely that the NEB would act as Lead Responsible Authority (an application to construct and operate a pipeline under Section 52 of the *National Energy Board Act* is a trigger under *CEAA*), given the likelihood that pipelines would be constructed to transport gas from the offshore.



Department of Fisheries and Oceans

If a proposed project is determined by DFO to result in the harmful alteration, disruption or destruction (HADD) of fish habitat, an Authorization for Works or Undertakings Affecting Fish Habitat under Section 35(2) of the *Fisheries Act* is required. As Section 35(2) authorization is a Law List trigger under *CEAA*, DFO will also be a Responsible Authority with respect to the environmental assessment of the project. Further, as a condition of this authorization, a developer is required to develop a fish habitat compensation plan that will be used by DFO in the development of a compensation agreement to compensate for losses of productive fish habitat in accordance with DFO's Policy for the Management of Fish Habitat. Given the importance DFO places on HADD and compensating for a HADD determination, a brief overview of the HADD compensation process is provided in Appendix 2.

Environment Canada

Environment Canada determined both for Terra Nova and White Rose projects that the construction of glory holes during the project and the deposition of spoils upon the surrounding seabed likely will require a Disposal at Sea Permit under the *Canadian Environmental Protection Act*, and that Environment Canada is a Responsible Authority. If an offshore development intends to use glory holes, or is burying/trenching pipelines, Environment Canada would be a Responsibility Authority.

Industry Canada

Industry Canada has determined for White Rose that the radio equipment on the production installation will require its approval pursuant to Section 5(1)(f) on the *Radiocommunications Act*, and that it, therefore, is also a Responsible Authority respecting the proposed project. It is very likely that Industry Canada will be a Responsible Authority for any offshore development that conducts radio communication.

DFO-Canadian Coast Guard

An approval may be required under the *Navigable Waters Protection Act (NWPA)* (DFO-Canadian Coast Guard) in cases where proposed development activities have the potential to interfere with navigable waters (this is usually limited to 12 nautical miles from shore). In the event there is a nearshore/onshore section of pipeline, there would be a trigger under the *NWPA*, and therefore, DFO-Canadian Coast Guard would also be a Responsible Authority.

Process

Offshore development falls within the *Comprehensive Study List Regulations*, Part IV, Oil and Gas Projects, Section 11. The lead Responsible Authority is designated from among the Responsible Authorities, and is responsible for coordinating the government and public review.

The submission of a project description document serves the purpose of project referral to federal authorities pursuant to *CEAA*. Because of the regulatory overlap between the Accord Acts and *CEAA*



with respect to environmental protection, the respective processes may be harmonized with respect to fulfilling information requirements of both processes (or three, if the NEB is involved, as is the case if a development includes the construction and operation of a pipeline).

The review of a Comprehensive Study can be conducted concurrently or in advance of the DA (as was the case with the White Rose DA) (However, the Commission's Notice of Agenda for Public Hearings (see Section 2.2.2.1) cannot be published until the federal Minister of Environment has released the project from *CEAA*).

2.3.3.2 Development Approval

Prior to the construction and operation of a development, other federal authorizations, permits and licenses must be acquired exclusive of release from *CEAA*. The primary approvals are:

- HADD Authorization (note that HADD must be quantified and a Habitat Compensation Strategy provided to DFO prior to release from *CEAA*) – the HADD Authorization can be negotiated with DFO concurrently with the DA Approval process (in anticipation of release from the DA process and approval to proceed with the project), but must be in place prior to any disturbance of the substrate (see Appendix 2);
- Ocean Disposal Permit – an Ocean Disposal/Disposal at Sea Permit application can be forwarded to Environment Canada concurrently with the DA Approval process (in anticipation of release from the DA process and approval to proceed with the project), but must be in place prior to an displacement of the substrate; and
- Radio License – a Radio License application can be forwarded to Industry Canada once approval to proceed with the project is provided, but prior to the installation of the production facility.

2.3.4 Joint National Energy Board/*Canadian Environmental Assessment Act*/Board Process

2.3.4.1 Project Approval

If a pipeline (>40 km) is required, then *CEAA* is triggered by the application for a Certificate of Public Convenience and Necessity (currently, only Nova Scotia has export pipelines from offshore gas developments). In that case, the NEB would act as a Responsible Authority and provide input into the issues scoping package, provide comment on a filed Comprehensive Study and sign-off on a Comprehensive Study Report (which may be delegated to the proponent to prepare). Any public hearings (NEB requires public hearings for pipelines >40 km in length) could be coordinated between the NEB and the C-NSOPB or other Board.

The Responsible Authorities, which sign-off on the Comprehensive Study, must respond to any recommendations made by the Public Hearings Commission, with the approval of the Governor in Council (GIC). If the Comprehensive Study, and therefore, the application for a Certificate of Public



Convenience and Necessity, is released from *CEAA*, the application would then complete the NEB regulatory process, as described in Section 2.1.

2.3.4.2 Development Approval

Once the pipeline has been approved and undergone the required testing, the proponent must file an application for leave to open the pipeline from the NEB.

2.3.5 Other Approval Processes

2.3.5.1 Nova Scotia Utility and Review Board Approval Process

The construction and operation of a pipeline on Nova Scotia lands (which includes the offshore) requires authorization from the Nova Scotia Utility and Review Board (NSUARB) (ACPI and Erlandson & Associates 2001a), pursuant to the *Pipeline Act*. Specifically:

- permits to construct a pipeline; and
- license to operate a pipeline.

NSUARB only gets involved with onshore and offshore pipeline permitting that is not NEB regulated (*i.e.*, liquid lines that are not tied into a NEB-regulated transmission system (e.g., Maritimes and Northeast Pipeline) or do not otherwise cross inter-provincial boundaries).

2.3.5.2 Other Nova Scotia Regulatory Agencies

Several provincial regulatory agencies have signed Memoranda of Understanding (MOU) with the C-NSOPB, which allows these agencies the ability to address issues arising from overlapping jurisdictions. These include (ACPI and Erlandson & Associates 2001a) the:

- Nova Scotia Department of Environment and Labour;
- Nova Scotia Department of Natural Resources; and
- Energy Resources Conservation Board.

The Nova Scotia Petroleum Directorate has direct responsibility for administering the offshore royalty regime and is directly involved with providing the C-NSOPB with advice on a number of issues, including benefits. It also has MOU with other provincial regulatory agencies and provides a one-window process as the primary means of promoting consultation and communication among the agencies (ACPI and Erlandson & Associates 2001a).

The Nova Scotia Department of Fisheries and Aquaculture is a member of the C-NSOPB Fisheries and Environmental Advisory Committee. The Office of Aboriginal Affairs in Nova Scotia does not exercise regulatory functions in offshore Nova Scotia; however, it is currently in discussions which might affect



offshore oil and gas development as a result of recent court cases initiated by aboriginal communities (ACPI and Erlandson & Associates 2001a).

2.3.5.3 Other Newfoundland Regulatory Agencies

The Newfoundland and Labrador Department of Mines and Energy enacts legislation and regulations similar to the Newfoundland Accord Acts for offshore areas. In conjunction with the federal Minister of Natural Resources, the Minister of Mines and Energy is responsible for issuing directives to the C-NOPB and reviewing fundamental decisions issued by the C-NOPB (ACPI and Erlandson & Associates 2001b).

Several provincial regulatory agencies have signed MOU with the C-NOPB, which allows these agencies the ability to address issues arising from overlapping jurisdictions. These include (ACPI and Erlandson & Associates 2001b) the:

- Newfoundland and Labrador Department of Environment (recognized as the principal advisor to the C-NOPB);
- Newfoundland and Labrador Department of Labour; and
- Newfoundland and Labrador Department of Fisheries and Aquaculture.

2.3.5.4 Shore-based Facilities

It should be noted that if any shore-based facilities need to be constructed specifically for an offshore project, then those facilities may also be subject to *CEAA* and/or the relevant provincial authority. It is assumed that the potential effects of construction and operation of shore-based facilities would be assessed under the British Columbia *Environmental Assessment Act* (refer to Section 2.2).

2.3.6 Lessons Learned

Based on the recent experience with the White Rose development (and previous environmental assessments), the following are key lessons learned about the Atlantic Canada regulatory process:

- the Comprehensive Study required by *CEAA* can fulfill the EIS/SEIS requirements of the C-NSOPB/C-NOPB;
- the release of the project from *CEAA* triggers the public review under the Accord Acts (*i.e.*, the Notice of Agenda for the public hearings may not be made public until the federal Minister of Environment has released the Comprehensive Study from *CEAA*);
- liaison with stakeholders is key to the success of the project, including
 - early meetings with regulators to identify key issues, and
 - early public meetings (prior to the formal process) to both provide information to communities and stakeholders and to solicit comments and issues of concern;
- upon delivery of the environmental assessment document, a meeting for all regulators is advised to



present findings to assist regulators in their review of the document and provide clarification of any aspects of the environmental assessment; and

- early clarification of the internal regulatory review process due to harmonized nature of the various approvals processes is essential.