

Guideline

Petroleum Drilling Regulations (CNR 1150/96)

Topic: Drilling Applications - Exploratory Wells
Submission, Review and Approval Process

Ref: Sections 7, 24 and 29 of the ***Petroleum Drilling Regulations***

7. *A person may apply for a drilling program approval in respect of a proposed drilling program by completing and forwarding in triplicate to the director an application in the form prescribed by the director.*
24. (1) *A person shall not*
(a) drill a well unless authorized by an authority to drill a well; or
(b) re-enter a well that has been suspended unless the re-entry has been authorized by the director.
29. *An operator shall submit in triplicate to the director an application for an authority to drill a well not less than 21 days before the date he or she plans to spud-in.*

1.0 PURPOSE

The purpose of this Guideline is to give companies holding Exploration Permits or Exploration Licences, that wish to drill wells under the ***Petroleum Drilling Regulations***, an overview of the application submission, review and approval process currently in place by the Department of Industry, Energy and Technology, Petroleum Development Section.

In addition, many of the basic regulatory requirements are outlined.

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2.0 OVERVIEW

A company wishing to drill a well onshore, as defined in the ***Petroleum Drilling Regulations***, requires the following:

.1 A Valid Exploration Permit or Exploration Licence

In accordance with the ***Petroleum Regulations***, petroleum exploration rights issuance instruments are:

An **Exploration Permit** which confers the “... *exclusive right to drill and test for petroleum to any depth in the permit area.*” (section 24(1)(b))

Exploration Permits are issued for an initial 5 year period for a specific parcel of land. Issuance is usually the result of competitive bidding. The majority of petroleum exploration drilling occurs on lands for which the operator holds an Exploration Permit. Drilling can also take place on an Exploration Licence or a Lease.

An **Exploration Licence** which confers the “... *non-exclusive right to conduct an exploration survey....*” (section 10(1))

Exploration Licences are issued for one or a group of exploration surveys.

In addition to seismic surveys etc., an exploration survey may include test holes, stratigraphic wells and petroleum exploration wells *outside existing Exploration Permit areas*.

Exploration Permits and Exploration Licences are issued by the Department of Industry, Energy and Technology.

The company responsible to the Department for all aspects of the drilling program, known as the Operator, will be either the company which was awarded the Exploration Permit or Exploration Licence or has been designated by the permit holder as its representative. A letter outlining designation is required to be submitted to the Department.

.2 Registration

Companies conducting work in the province must be properly registered pursuant to *The Corporations Act*.

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.3 Approval to Conduct the Drilling Operation

This is achieved by obtaining a **Drilling Program Approval (DPA)** and an **Authority to Drill a Well (ADW)** from the Department of Industry, Energy and Technology. When the applications for the above **DPA** and **ADW** are received by the department a completeness review will be conducted. After this initial review is complete, any deficiencies identified to that point will be provided to the Operator. Another full **DPA** and **ADW** application template completed by the Operator, addressing these deficiencies will be required before the Department begins its formal assessment of the applications, assuming sufficient information has then been provided.

.4 Other Licenses, Permits and Authorizations

The well drilling program will be subject to applicable regulations from other Departments. In order to assist in identifying other approvals and to identify any fundamental land use or environmental concerns regarding the proposed drilling project, the operator is asked to submit an information package used for referral. Turnaround for this documentation is usually two to three weeks but could take longer depending on the proposed location. A guideline to this package

(Guideline for Information Submission to the Petroleum Exploration Referral System) is posted on the Department's website:

http://www.nr.gov.nl.ca/nr/energy/petroleum/onshore/PERS_Guideline_Update_Dec23.pdf

.5 Financial Responsibility

The Operator must carry adequate insurance (\$10 million Operator's Extra Expense) and provide financial securities covering the abandonment and site restoration liabilities that may be incurred in the drilling operations. An estimate of these costs must be prepared by the Operator and submitted to the Department for approval. These financial securities may also be used to ensure reporting and other regulatory requirements are met by the Operator.

3.0 PRELIMINARY WORK

.1 Early Stage Discussions

Prior to preparing the **Drilling Program Approval** and the **Authority to Drill a Well Application Templates**, the operator should contact the *Petroleum Development Section* (petroleum_development@gov.nl.ca).

Early communication will enable Section staff to assess the scale and impact of the proposed operation. Staff and the operator can also address any major technical and administrative issues and concerns. The need for the

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Petroleum Exploration Referral described above can be assessed through this process. The need for the operator to conduct a Public Briefing Session can also be discussed.

.2 Other Approvals

Depending on the information obtained in the early stage discussions, an information package may be required for submission to other government agencies. Where time allows, the operator may elect to defer the preparation and submission of the information package until the final details of the proposed operation are known. The operator should note however that the process for obtaining some permits and approvals from other government departments and agencies can be extensive.

The review of the information referral document serves to identify any concerns which may impact on the nature and timing of the proposed operations. This review may assist in obtaining permission to conduct operations at the site

Historically, the operator submits the information package well in advance of the ADW and DPA applications to enable it to obtain an initial response from other agencies indicating whether there are any fundamental objections to the proposal and help identify other permits, authorizations etc. required for the proposed operation. The operator is then in a position to modify its plans prior to the submission of the detailed DPA / ADW application templates to the Department.

The lead time required is a function of the complexity and sensitivity of the proposed project.

.3 Scope of Work

As identified, a drilling approval is requested by the Operator with the submission of the **Drilling Program Approval and Authority to Drill Well** applications. The level of detail required must include the following:

- **Location of Drilling Operations**

- Remote location?
- Environmentally sensitive area?
- Extreme Prevailing Environmental Conditions?
- Residences nearby?
- First drilling operation in the area?
- Site access construction required?

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Private land?
Is the well proposed for an existing Exploration Permit?
Spacing requirement met as per Section 24.(5) of the *Petroleum Regulations*?

- **Nature of Operations**

Depth of well?
Offset well information i.e.; pressures, geology, etc.?
Oil or gas?
Potential to encounter H₂S?
Conventional rotary, new drilling technology or adapted technology i.e.; core rig?
Specific equipment/contractor to be utilized?
Required exemptions to the **Petroleum Drilling Regulations**?
Exploration or development well under **Petroleum Drilling Regulations**?
Test hole under **Petroleum Drilling Regulations**?
Stratigraphic well under **Petroleum Regulations**?
Valid geological/geophysical targets with supporting data?
Proposed well evaluations?
Casing and cementing design?
Waste management practices?

- **Supervisor/Contractor background**

Experienced oil and gas contractor?
Onsite supervision by operator or consultant?
Crew and supervisor certifications?

- **Operator Information**

Corporate Emergency Response Plan?
Corporate Occupational Safety and Health Policy?
Well contingency plans?
Plans to cope with emergency situations?
Sufficient resources or outside consultants to handle emergency situations?
Petroleum drilling activities and operations experience?

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4.0 APPLICATION

.1 Application Required

An application must be submitted to the Department of Industry, Energy and Technology for the drilling of any well meeting the following definition in the **Petroleum Drilling Regulations**:

“well” means any opening in the ground that is not a seismic shot hole and that is being made, to be made or is in the process of being made, by drilling, boring or any other method

(i) through which oil or gas could be obtained,

(ii) for the purpose of searching for or obtaining oil or gas,

(iii) for the purpose of obtaining water to inject into an underground formation,

(iv) for the purpose of injecting gas, air, water or other substance into an underground formation, or

(v) for any purpose through sedimentary rock to a depth of at least 150 meters.

Definition (v) is only strictly applied in the case of a drilling operation related to oil and gas activity.

.2 Application Procedure

The Operator formally initiates the application process by submitting the following at least 21 days prior to the anticipated spud date:

! **An Application for Drilling Program Approval (DPA)**

This is a one page form covering the general aspects of the drilling program.

! **An Application for an Authority to Drill a Well (ADW)**

This one page form contains well specific information. A separate application is required for each well under the drilling program.

! **Supporting Information**

The basic information including requirements for each of the above applications are listed in the **Petroleum Drilling Regulations** (sections 7 to 23, and 24 to 115 respectively) and are clearly defined in the DPA and ADW Application Templates.

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Depending on planned activities, not all of the regulations may apply. Section staff will assist in determining information and the level of detail required, on a case by case basis and review same with the Operator. As stated above the format of the application package is clearly outlined in the application templates and the preferred submission is in Portable Document Format (pdf format).

Application forms and templates are available on the Department's website: <http://www.nr.gov.nl.ca/nr/forms/energy/index.html>

.3 Information Provided by the Department

The Department has developed several guidelines and templates to assist the operator in assembling the application package and determining regulatory reporting requirements. A few are posted on the Department's website and others are available from the department by request.

.4 Application Restrictions

The Department accepts these applications **only** from operators which hold a valid Exploration Licence, Exploration Permit or Lease or are the designated representative of a holder of a valid Exploration Licence, Exploration Permit or Lease. A formal letter of designation is required to be submitted to the Department by the Operator.

5.0 REVIEW

.1 Application Review

A review of the application is conducted by staff of the Petroleum Development Section. This review covers the operational, engineering, geological, geophysical and financial security aspects of the application. This review, related communication with the operator and subsequent submission of revised or supplemental material may take up to one month or longer depending on the well locations, nature of the operation and the completeness of the original submission. The operator should be aware that the ***Petroleum Drilling Regulations*** require that an application be submitted at least 21 days prior to the planned spud date.

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.2 Public Issues

During, or sometimes prior to, the **DPA** and **ADW** application review, the Department will inform the operator if a **Public Briefing Session** will be required. The session may be held jointly by the Operator and the Department.

It is within the Minister's discretion to initiate public briefing sessions or hearings concerning proposed exploration or development activities. Such public consultation may be necessary when the proposed activity has the potential to have a significant effect on the environment or local population, or when the Minister deems it desirable to inform the public of proposed activities in this manner to help facilitate a mutual understanding and cooperation between the operator and local residents. The operator should be prepared for the possibility of participating in or conducting public briefing sessions or hearings.

6.0 FINANCIAL RESPONSIBILITY

.1 Regulations

Section 14 of the **Petroleum Drilling Regulations** addresses the requirements for financial securities covering the drilling operations. The applicant shall, when requested by the Minister;

- 14(a) furnish to the minister a performance bond in a form and an amount satisfactory to the minister requiring the surety named in the bond to terminate the well and leave the drill site in a satisfactory condition in the event of the failure of the operator to comply with these regulations; and*
- 14(b) furnish evidence to the minister, in a form satisfactory to the minister, that he or she is financially able to meet financial liability that may be incurred as a result of the drilling of a well.*

The Minister also has discretion to append conditions to approvals. One typical condition is that any financial liability provided by the Operator could also be used to address deficient reporting and data submission requirements, such as end of well reports.

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.2 Bonding etc.

The acceptable forms of security required for all drilling operations as a **Condition of Approval** which must be in place before operations commence are either a certified cheque or an irrevocable letter of credit.

* Upon receipt at the Department all certified cheques will be immediately placed into a security account.

The amount of the security is determined by the Department based on the scale and impact of the proposed operations. An estimate of the cost to abandon the wellbore as per regulatory requirements and remediate the site is required to be submitted by the operator. As a condition of approval the security could also be used to complete reporting and data submission requirements, at any time, should the operator fail to do so.

The type and expiry date of the security and the mechanism for release of same will be discussed with the operator and decided upon by the Minister prior to the approval of the **Application for Authority to Drill a Well**.

.3 Insurance

The Operator will be required to carry *Operator's Extra Expense Insurance* which normally includes:

- Control of Well
- Redrilling/Extra Expense
- Seepage and Pollution, Cleanup and Containment
- Care, Custody and Control
- Deliberate Well Firing
- Extended Redrilling and Restoration Cost
- Evacuation Expenses
- Joint Venture Contingent Liability
- Making Wells Safe
- Removal of Wreckage and/or Debris
- Turnkey Wells
- Underground Control of Well
- Unlimited Redrill

In the case of conventional rotary rig drilling, the policy usually has a value of \$10 million dollars. The acceptability of a specific insurance level proposed by the operator will be determined by the Minister during the application review.

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.4 Financial Liability

If the Operator is a publicly held company, the previous year's annual report should be submitted to confirm that there are adequate finances available to cover the potential liability incurred in the event of a major environmental incident. If the company is not publicly held, a statement attesting to its financial health from a recognized accounting firm may be required.

Satisfying the requirements of section 14 of the *Petroleum Drilling Regulations* does not in any way reduce the operator's financial liability in the case of a blowout, environmental incident or failure to properly terminate the well.

7.0 APPROVALS

.1 Industry, Energy and Technology Approval

Once the Department is satisfied that all fundamental requirements, as identified by the review process, and Departmental regulations have been met, approvals are issued by the *Minister of Industry, Energy and Technology* with attached *Conditions of Approval*.

Approvals are issued by the Department for the following:

X Drilling Programs

Consisting of the drilling of one or more wells that utilize the same drilling rig, key personnel and techniques for a specified area. The **Drilling Program Approval** (DPA) covers a period not exceeding 3 years.

X Wells

A separate approval is required for each of the wells in the above mentioned Drilling Program. The **Authority to Drill a Well** (ADW) is conditional on drilling commencing within 120 days of its issuance.

The Operator is then authorized to commence drilling, subject to meeting all other provincial and federal regulations.

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.2 Joint Jurisdiction

Directional wells drilled from an onshore location to an offshore target cross the onshore/offshore jurisdictional boundary. The offshore area is administered by the **Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB)** while onshore drilling is solely provincial jurisdiction administered by the **Department of Industry, Energy and Technology**.

In the case of a joint jurisdiction well, the operator must apply to the Department of Industry, Energy and Technology as the lead agency. A draft Memorandum of Understanding MoU has been prepared between the C-NLOPB and the department addressing approvals to conduct petroleum drilling operations. The application process and information requirements are similar, however the operator is advised to meet with the C-NLOPB as additional requirements with respect to Operators Licensing, oil spill response and well evaluation data acquisition do apply. Correspondence and approvals are coordinated by the C-NLOPB and Industry, Energy and Technology to minimize duplication of effort and paperwork.

Guidelines addressing reporting and information gathering requirements for these joint jurisdiction operations have been developed to assist the operator.

8.0 QUERIES

All queries should be directed to Petroleum Development Staff at the following:

For mail queries:

Petroleum Engineering Division
Department of Industry, Energy and Technology
P.O. Box 8700
St. John's, NL
A1B 4J6

For couriered packages, the physical address is:

4th Floor, Natural Resources Building
50 Elizabeth Avenue
St. John's, NL
A1A 1W5

email: petroleum_development@gov.nl.ca

fax: 709-729-2508

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