

Application for Approval of an Experimental Scheme

Background

Section 100 (1)(b) of the *Petroleum and Natural Gas Act* (Act) provides that a scheme for the experimental application of oil field technology as defined by regulation must not be proceeded with unless the Oil and Gas Commission (Commission), by order, approves the scheme on terms the Commission specifies.

Upon the approval of the scheme, well records and well data relating to a well forming part of an experimental scheme are maintained under confidential status for three years from the date of rig release of the well, and upon application to the Ministry of Energy, Mines and Petroleum Resources, petroleum and natural gas tenure within the scheme area may be continued.

When to Make This Application

The Regulation defines an experimental scheme as a scheme “using methods that are untried and unproven in the particular application”. A scheme may qualify as an experimental scheme if one or more of the following are satisfied:

1. The scheme is planned and directed towards testing a novel process, technique or procedure or applying a new or established process, technique or procedure to a new reservoir situation;
2. The scale of the experimental scheme is no larger than necessary to test the process, technique, or procedure, and is small relative to what would be the case if the method is applied throughout the pool;
3. The time required for completion of the experimental scheme is short relative to the expected life of a commercial scheme using the process, technique or procedure.

Application Requirements

Basic requirements: The following information must be included in all applications for experimental scheme approval:

1. A statement indicating the nature of the experimental scheme.
2. A generalized overview of the geological considerations of the experimental scheme.

3. A legal description of the area to be included in the experimental scheme.
4. A map showing the area referred to in the application, together with the registered holders of the PNG rights within the experimental scheme area and in spacing areas adjacent to the experimental scheme area.
5. Letters of authorization from registered holders of the PNG rights within the experimental scheme area.
6. Applicable information contained within the confidential addendum section below.

Confidential Addendum: The Commission will require information and details of the experimental scheme proposal which would not normally be considered part of the public record. This information may be submitted separately from the main application and will be held confidential by the Commission. Where applicable, the following information should be provided:

1. An outline of proposed development strategy, including number of wells to be drilled, special analyses, cores, seismic information and specialized well logging techniques and any other information requested by the Commission to assist in its understanding.
2. A detailed discussion of the methodology to be used to develop the scheme, identifying the methods that are untried and unproved in the particular application.
3. A detailed summary of the geological consideration of the project including reservoir characteristics, petrophysical parameters, regional setting, structure and fluid properties. These should be supported by relevant mapping and cross sections.
4. A prediction of resource potential or hydrocarbons in place and expected ultimate recovery of hydrocarbons.
5. A discussion of the pressure production history of the pool in which the experimental scheme is proposed, including isobaric maps and a graphic history, showing production rates and cumulative production volumes, together with appropriate gas-liquid and water-oil ratios.
6. Graphical presentation of the production histories for all wells in the area, showing production rates and cumulative volumes, together with appropriate gas-liquid and water-oil ratios.
7. A discussion of how the release of information regarding the process, technique or procedure could affect the competitive advantage (or business interests) of the company.
8. A general discussion of the broad economics of the scheme, including the potential for improved hydrocarbon recovery if the process, technique or procedure is successful.

Two copies of the application should be submitted to the attention of:

Director, Resource Conservation
Oil and Gas Commission
6th Fl, 1810 Blanshard Street
Victoria, BC V8T 4J1

Additional copies of the basic application may be made available to owners directly affected, upon request. Notice of an application may be posted to the Commission website at: www.ogc.gov.bc.ca.

Approval Considerations

A key consideration for the Commission in evaluating applications for approval of an experimental scheme is whether the application satisfies the test of using methods that are untried and unproved in the particular application. Proponents should be placing considerable focus on the details of the methodology or techniques being used to exploit the resource in the scheme area. Exploration in an unconventional resource play and/or a lack of commerciality, although taken into account when making decisions, is not in and of itself justification for issuing an experimental scheme. Furthermore, the Commission may consider the existence of similar experimental schemes in similar pools or play types, when making a determination.

In making application, the Commission expects proponents to request an experimental scheme area limited to a suitable size and consistent with the proposed work commitment (number of wells drilled, or re-completion program). The Commission may approve a reduced approval area where deemed necessary.

In the event of a dispute between the applicant for an experimental scheme and another holder of petroleum and natural gas rights regarding the proposed scheme before the Commission has decided the application, the Commission will facilitate a process to resolve the dispute.

Upon demonstrated success of the experimental scheme, the operator may require an approval of a production scheme for the balance of the pool within which the experimental scheme was conducted, typically Good Engineering Practice under section 101 of the Drilling and Production Regulation. The Commission may terminate the experimental scheme approval upon approval of the production scheme or, upon notice by the Commission, if the Commission is satisfied that the experimental scheme is completed or no longer serves the intended purpose.

Experimental scheme approval requires the submission of Progress Reports as stipulated under section 8 of the Petroleum and Natural Gas General Regulation. Such reports will be held confidential by the Commission for a

period of time not less than the minimum confidential period of the scheme approval.

A refusal of an application for an experimental scheme or the cancellation of an approval of a scheme by the Commission under section 100 does not preclude an operator from re-applying for an experimental scheme. The Commission expects that an operator might re-apply in situations where new or additional information is presented regarding the novel process, technique or procedure being employed.