

7. Well Activity: Overview

The wells activity section of this manual provides operating guidelines for regulatory requirements throughout the operations life cycle of the permitted activity. Permit holders must complete a Notice of Construction Start as detailed in Chapter 4 of this manual. Prior to beginning construction, submit a Notice of Construction Start via [eSubmission](#). Notices must be submitted prior to commencement of land clearing and/or the set-up of equipment on location and at least 48 hours before construction is to begin. Associated oil and gas activities, if required in addition to the oil and gas activity permit, are touched on in Section 3.1 of this manual.

Please Note:

This manual is written as a whole and provided to industry in sections to allow permit holders to access activity chapters. It is prudent of the permit holder to review the manual in its entirety and be aware of the content in other sections of the manual

7.1 Wells Permitted Activities

All permit holders are ultimately responsible for ensuring they understand and meet all legal and regulatory requirements of the permit, including all conditions attached to the permit. If an exemption is requested from regulatory requirements, an exemption must be prepared at the time of application. Permit holders must contact the Regulator prior to commencing construction or operations if the adherence to the permitted activity cannot be met. The Regulator may be able to provide further guidance and clarification.

Section 4 of the [Drilling and Production Regulation](#) (DPR) provides a list of sections to which an exemption may be granted. Requests for an exemption or variance after the permit is issued should be submitted for approval to the Regulator's Drilling and Production department.

7.1.1 Wells Defined

Wells are an oil and gas activity as defined in ERAA, and are specifically defined in the [Petroleum and Natural Gas Act](#) as:

A hole in the ground:

- a) Made or being made by drilling, boring or any other method to obtain petroleum or natural gas.
- b) Made or being made by drilling, boring or any other method to explore for, develop or use a storage reservoir for the storage or disposal of petroleum, natural gas, water produced in relation to the production of petroleum or natural gas, waste or any other prescribed substance.
- c) Used, drilled or being drilled to inject natural gas, water produced in relation to the production of petroleum or natural gas or other substances into an underground formation in connection with the production of petroleum or natural gas.
- d) Used to dispose of petroleum, natural gas, water produced in relation to the production of petroleum or natural gas, waste or any other prescribed substance into a storage reservoir, or
- e) Used, drilled or being drilled to obtain geological or geophysical information respecting petroleum or natural gas.

And includes a water source well.

7.1.2 Regulatory Requirements

Well activities must meet the design and operational requirements outlined in the [Oil and Gas Activities Act](#) (ERAA), [Drilling and Production Regulation](#) (DPR), the [Environmental Protection and Management Regulation](#) (EPMR).

Additional legislation, regulations and/or standards permit holders should adhere to include:

- [Contaminated Sites Regulation](#) (CSR)
- [Oil and Gas Waste Regulation](#) (OGWR).
- [Hazardous Wastes Regulation](#) (HWR).
- [Spill Reporting Regulation](#) (SRR).

- [Inline Testing Directive](#).
- [Well Data Submission Requirements Manual](#)

7.1.3 Guidance Requirements

Well activities should meet guidance recommendations in the following Regulator documents:

- [Management of Saline Fluid for Hydraulic Fracturing Guideline](#)
- [British Columbia Noise Control Best Practices Guideline](#)
- [Flaring and Venting Reduction Guideline](#)

7.2 Well Permit Amendments

A well permit amendment is required for changes to approved well permits as outlined in the following scenarios. Approval of a well permit amendment is required before the associated changes are carried out. Amendment scenarios include:

- Surface footprint (surface disturbance) is changed.
- Change in well type (for example from Production to Disposal)
- Change in BHL with attendant changes in well profile such that the well name adds or deletes "HZ"
- Adding (drilling) a new bottom hole location to a well that has previously been drilled and rig released. This can include lengthening the depth, window cutting, or O/H sidetracking from an existing wellbore.

Note: an Engineering Data Sheet must be submitted with the amendment application as an "Other Attachment".

Well permit amendments must receive permission for flaring which is not included in the original permit, nor found in Section 42 of the [Drilling and Production Regulation](#).

A permit amendment is not required for the following changes but must be reported using the As Drilled Survey Plan process in eSubmission:

- Minor changes if the proposed final total depth (FTD) resulting from geological prognosis change or minor changes in well centre coordinates.
- When changing well head location if there is no change to wellsite location or to well head surface location (NTS or DLS coordinates). For example, a permit amendment is not required when moving the well head within the well site area, but new coordinates must be reported on the Summary Report of Drilling Operations (SRDO). See section 8.2.1 of this manual for further information on the SRDO.

See section 7.2.1 - Notification of Minor Well Change of this manual for information regarding other minor well changes that do not require an amendment.

A well permit amendment is submitted through the Regulator's Application Management System. Refer to the [Oil and Gas Activity Application Manual](#) for specific details. Minor changes in surface wellsite co-ordinates and notification of minor well changes are collected through the [eSubmission portal](#).

7.2.1 Notification of Minor Well Changes

Effective December 11, 2024, the notification permission clause will be included in all new well permits. It will also be added to all well amendments and well permit extensions. This is being implemented to provide permit holders a means of notifying the Regulator of administrative and/or operational activity where an amendment is not necessary. Permit holders must ensure the notification permission has been added to each permit prior to submitting a notification of minor well change through eSubmission.

Minor well changes made to adjust the list of sour formations to be encountered, anticipated H₂S content, anticipated maximum H₂S release rates, emergency planning zone distances, list of critical features within the emergency planning zone, target formation and associated depths, formation at total depth and associated depths, blowout preventer class to be used during drilling, and the maximum volume and H₂S content of gas to be flared, do not require an amendment to the permit provided that:

- prior notice of the change is provided, in the form and manner the BC Energy Regulator requires;
- notice of the change, other than for changes to the maximum volume and H₂S content of gas to be flared, is provided to the Regulator not less than 7 days in advance of the change taking effect;
- there is no substantive impact to any aspect of the activities that was included in the consultation;
- The well activities continue to meet all regulatory requirements and applicable standards.

Only the following activities that are listed in the notification permission can be submitted as a notification:

Well Hazard Planning

- Sour Formations, and Maximum H₂S Concentration (%) therein
- H₂S Release Rate (Maximum Cumulative Drilling, Maximum Completion, Maximum Applicable)
- EPZ Distances (Calculated Drilling, Calculated Completion, Effective)
- Critical Features, and # within Effective EPZ

Bottom Hole Details

- Formation at Total Depth
- Expected Total Depth (TVD, MD) (m)
- BOP Class
- Objective Formation
- Objective Depth (TVD, MD) (m)

Well Flaring

- Flaring Objective Formation
- Maximum H₂S Concentration (%)
- Requested Volume (10³m³)

The notification can be submitted as a “Notification of Minor Well Change” through eSubmission. If a Permit holder is submitting an amendment for activities that do not fall under the notification criteria, they may also include the notification changes as part of the amendment application.

7.2.2 Well Re-entries

A drilling re-entry is defined as additional drilling on a well that had previously been drilled and rig released. A well permit amendment is required to re-enter a well that has not been issued a Certificate of Restoration (CoR). A new well permit is required to re-enter a well issued a CoR. Refer to the [Oil and Gas Activity Application Manual](#) for the permit application and amendment processes.

7.2.3 Junked or Lost Hole Policy

When a problem is encountered in drilling a well, the drilling rig can be skidded and a new well spudded under the same well permit providing:

- The surface casing has not been set and data (for example, sample) has not been collected.

The skidding of the rig and drilling of the new hole may proceed without delay, but the well operator must submit an amendment and attach copies of the new survey plan.

If surface casing has been set on a drilling well and the hole below the shoe is junked or lost due to drilling problems, a new well permit is required to skid the rig and drill a new hole. In these situations, the permit processing may be expedited by the Regulator provided no changes to the existing location are required.

7.3 Well Data and Well Data Submission

Drilling activities must be reported to the Regulator in accordance with Section 8 of the [Drilling and Production Regulation](#) and any well permit conditions. Any questions or problems should be directed to the Drilling and Production Department, Engineering Operations Technician.

Well Reports and Well Data are defined in Section 14 of Energy Resource Activities Act General Regulation as information obtained from or about a well, including drill cuttings, core samples and several specific types of data, reports, surveys and information. The [Drilling and Production Regulation](#) provides submission requirements for well reports and well data. Further guidance on submission processes and requirements is available in the Regulator's [Well Data Submission Requirements Manual](#).

The Regulator holds and releases confidential well reports and well data as per Section 17 of the Energy Resource Activities Act General Regulation.

Special Data Well Designation

The special data well designation was introduced to recognize operators for obtaining specified, high value well data by providing extended confidentiality to a period of 18 months from rig release date. Refer to the Regulator's [Summary Information: Special Data Wells](#) document for further information on application requirements, processes and considerations.

Discovery Well Designation

A discovery well is a well from which, in the opinion of a designated Regulator official, sufficient information has been obtained to determine that the well has encountered a previously undiscovered pool. Wells designated as Discovery Wells are classified as exploratory wildcat under Section 2(3) of the [Drilling and Production Regulation](#), extending the confidentiality period to the duration specified in Section 17(1) of ERAA. Refer to the Regulator's [Summary Information: Discovery Wells](#) document for further information on application requirements, processes and considerations.

SIMOPs (Simultaneous Operations) Plan Requirements (Previously Concurrent Operations Plan)

Definition

SIMOPs: any situation where two or more operations are close enough to interfere with each other, or transfer risk or performance implications between them.

Operations: performing drilling, completion, well intervention, construction or production activities.

Scope

These requirements is to ensure consistency in the identification and mitigation of risk associated with simultaneous operations on a well site/pad in which existing offset well(s) or other infrastructure are at risk from the simultaneous operations. Note: the resultant impact/damage is not necessarily limited to an uncontrolled release of hydrocarbons.

Section 12 of the Drilling and Production Regulation (DPR) requires that permit holders minimize the risk of loss of well control, which includes addressing operations beyond well interventions. Permit holders must design and implement a SIMOP plan in a manner that supports safe life of well operations for existing and proposed infrastructure, and in a manner that protects public health and safety, protects the environment, and for the conservation of natural resources.

Examples of situations where a SIMOPs plan are required include, but are not limited to:

- A permit holder drills a new well that requests a spacing variance, or where the impact radius of the equipment required to drill and complete the new well could strike an existing well(s) or associated production facilities.
- Stimulate, complete, service or abandon a well where existing wells or production facilities could be affected by the well intervention.

SIMOPs Plan Contents

- Summary statement that documents the location and briefly details the combined operational processes (drilling, completion, workover, well service, plug and abandonment) that will occur during the operations.
- Summary of the hazard identification and risk assessment conducted respecting the transfer of risk or performance implications between the operations.
- Mitigation measures required, including:
 - Specifying the minimum wellhead separation distance being used, if drilling is part of the operation.
 - Addressing regulatory requirements related to operational spacing and fire control requirements, in particular Sections 45 and 47 of the DPR and Section 9.6.15 of the Oil & Gas Activity Operations Manual and determining the safe placement of all required equipment.
 - Verifying adequate egress routes remain following equipment placement.
 - Determining whether any wells or production equipment must be shut in, and if so, describing the method used to secure the wells or equipment.
 - Identifying other permit holders that may be affected by proposed operations.
 - Communication and coordination protocols, including with other permit holders if, applicable.

ERP

A valid Drilling and Completions ERP (also applied to work-over activities) must be submitted to the Regulator as required under the Emergency Management Regulation. The ERP must consider and address responsibilities during a SIMOP situation. Please see the Drilling & Initial Completions ERP Guidance Document for more information

SIMOPs Plan Documentation

Where SIMOPs plans are prepared as part of a well intervention, they must be included in the Notice of Operations submission as part of the program. A copy of the SIMOP plan must be kept on site during operations, and personnel participating in the operations must be familiar with its contents.

7.4 Emergency Management Program Requirements

7.4.1 Emergency Management Program and Response Plans

The Energy Resource Activities Act requires permit holders to prepare and maintain an emergency management program and a response contingency plan (ERP) as prescribed in the [Emergency Management Regulation](#) (EMR). The requirements and processes described in the EMR and the Regulator's [Emergency Management Manual](#) are designed to create a framework for the protection of the public, property and the environment from emergencies arising out of oil and gas activities.

Adequate emergency response procedures and plans must be in place for all wells before well construction, conducting well service operations and/or spudding well.

Response plans should include incident reporting requirements in accordance with the [Spill Reporting Regulation](#) and the [Regulator's Incident Reporting Instructions and Guidelines](#) document.

7.4.2 Notification for Residents in EPZ

Provide notification to residents within hazard planning zone for all wells prior spudding and at rig release.

7.4.3 Emergency Response Planning Meetings

Provide notice to the Regulator of emergency response planning meetings within two business days prior to drilling into first oil or gas formation. Notification is made via email to EMP@bc-er.ca.