

BRITISH COLUMBIA

The following regulations referenced in this document fall under the Oil and Gas Activities Act (OGAA) and can be viewed at www.bclaws.ca: Drilling and Production Regulation (D&PR), Environmental Protection and Management Regulation (EPMR), Geophysical Exploration Regulation, Pipeline and Liquefied Natural Gas Facility Regulation (PLNGF), Pipeline Crossings Regulation, and Fee, Levy and Security Regulation (FLSR).

Administration

1. Agency regulating oil and gas exploration/production: [BC Oil and Gas Commission](#) (BCOGC or Commission).
2. Contact for regulatory updates: <http://www.bcogc.ca> – See Legal and Regulatory in agency directory.
3. Docketing procedure: Under the Oil and Gas Activities Act (OGAA), the Commission Board exists at the governance level, guiding the affairs of the agency, including budget approval, service plans, and regulatory initiatives. See also www.bcogc.ca/about/board-directors. Regarding industry permit applications: by electronic submission to BCOGC.
 - a. Emergency orders: May be expressed orally or written depending on circumstances. See [OGAA Div. 2 - Orders](#).
 - b. Notice: See [OGAA Part 5: Compliance and Enforcement](#). See also Compliance and Enforcement Manual at <http://www.bcogc.ca/industry-zone/documentation/Compliance-and-Enforcement> (may fall under D&PR, OGAA, [CSA](#), PLNGF, EPMR depending upon deficiency or purpose of notification). See also D&PR – notice of operations. See also: How to serve documents and notices as per [OGAA s.79, 80](#).
4. Agency regulating air emissions: BCOGC. See also [EPMR – Part 2, 3](#).
5. Agency regulating water quality: BCOGC. See also [EPMR – Part 2, 3](#).

License

1. License required: Oil and gas activity permits: geophysical exploration, construction and operation of a; well, pipeline, facility (incl. LNG facility), storage reservoir, road, long-term water use, and activities prescribed by regulation. See [OGAA Part 3, s. 21](#) and definitions at www.bclaws.ca.
2. Conditions of license: Conservation/protection of: reservoir, forest, water, environment, wildlife habitat/ecosystems. Recognition and protection of social, cultural, heritage values. See also Environmental Protection and Management Regulation (EPMR) and Heritage Conservation Act. Engineering integrity/safety: Drilling and Production Regulation (D&PR) and Canadian Standards Association (CSA).

Bond/Surety

[OGAA s. 30](#): The Commission may require a permit holder, an applicant for a permit or a transferee of a permit to provide security to the commission, in the amount the Commission requires and in accordance with the regulations, to ensure the performance of an obligation under this Act, a permit or an authorization.

Via BCOGC website: <http://www.bcogc.ca/industry-zone/liability-management-rating-program>.

See also [FLSR](#).

1. Purpose of surety: Ensure operators carry financial risk of restoration.
2. Plugging and restoration: Security required for assurance.
3. Compliance bond required: No. Security ensures restoration compliance.
4. Types of surety accepted: Cash, Letter of Credit.
5. Conditions of bond: No cancellation without consent, automatic renewal.
 - a. Amount per well: Determined by liability model. \$0 - >\$200k.
 - b. Amount of blanket bond: N/A

Land Leasing Information

1. Leasing method: Crown petroleum and natural gas rights are sold once a month through a sealed-bid public tender under [s. 71 of the Petroleum and Natural Gas Act](#) (PNG Act). Disposition of tenure provides time limited ownership of specific parcels of PNG rights.
2. Notice method: Notice of disposition dates available on the [Ministry of Natural Gas Development \(MNGD\) website](#) under [Sales Notices](#). Notices of dispositions (sales results) are available via the [MNGD website](#) or in the [BC Gazette](#) on the Crown Publications website.
3. Minimum bidding \$ (per acre): Based on highest acceptable bid. Bids are sealed. The right to reject bids is reserved.
4. Qualification of the bidder: Individuals, corporations, or their agent. Questions can be directed to the Petroleum and Natural Gas Titles Branch within the MNGD at PNGTitles@gov.bc.ca
5. State statutes: See [PNG Act](#).
6. Maximum acres: See Petroleum and Natural Gas Drilling License Regulation (under the PNG Act). See also [PNG Act Part 5](#). See also MNGD website at <http://www.empr.gov.bc.ca/Titles/OGTitles/SalesNotices/Pages/Instructions.aspx>

7. Royalty rates: [PNG Act Part 10](#). See also [Petroleum and Natural Gas Royalty and Freehold Production Tax Regulation](#) under the PNG Act.
8. Agency in control of leasing: [Ministry of Natural Gas Development](#) (MNGD).

Setbacks

1. What rules/regulations/policies does your jurisdiction have in regard to well setbacks from private residences and/or other habitable structures for use by humans or animals? [D&PR –Part 3: Well Position, Spacing and Target Areas \(s.5 Position of wells, s.6 Spacing and target areas for oil wells, s.7 Spacing and target areas for gas wells\)](#). See also [Part 7](#); Safety, Security and Pollution Prevention. See also Pipeline Crossing Regulation for pipeline related requirements.
2. Are there other sources of information on this matter that you could identify? <http://www.bcogc.ca/industry-zone/documentation/wells>: See [Well Permit Application Manual](#) Appendix A.

Spacing

1. Spacing requirements: See [PNG Act](#)
 - a. Density: [PNG Act Part 7](#) – Spacing Areas. [D&PR Part 3](#).
 - b. Lineal: N/A
2. Exceptions: See [PNG Act](#)
 - a. Basis: In order to facilitate operations, promote conservation of PNG resources, and protect the environment.
 - b. Approval: Based on Good Engineering Practice (GEP).

Pooling

1. Authority to establish voluntary: May be initiated by application from holder, or invite for submissions by Minister. See [PNG Act - Part 8 – Pooling of Locations](#).
2. Authority to establish compulsory: Minister of MNGD may make pooling agreement. See [PNG - Act Part 8](#).

Unitization

1. Compulsory unitization of all or part of a pool or common source of supply: [PNG Act s.114](#) Unit agreement and [s.115](#) Unitization order. See also [OGAA s.75](#).
2. Minimum percentage of voluntary agreement before approval of compulsory unitization: [PNG Act s.114](#) Unit agreement and [s.115](#) Unitization order. See also [OGAA s.75](#).

- a. Working interest: N/A
- b. Royalty interest: N/A

Drilling Permit

1. Permits required for: See [OGAA Part 3, s.21](#)
 - a. Drilling a producing or service well: Yes. [OGAA Part 3, s.21](#). (Well permits allow the drilling, completion, operation and abandonment of a well). See also [D&PR](#).
 - b. Seismic drilling: Yes. [OGAA Part 3, s.21](#). See also Geophysical Exploration Regulation.
 - c. Recompletion: Depends on well status; either new well permit or well permit amendment. See <http://www.bcogc.ca/industry-zone/documentation/wells> Re-entries section in Well Drilling Guideline. See also [D&PR](#).
 - d. Plugging and abandoning: See a.
2. Permit fee: (refer to [FLSR](#))
 - a. Drilling: \$10,700 to \$18,700.
 - b. Seismic drilling: Geophysical Exploration permit application: \$1,650.
 - c. Recompletion: Depends on well status; either new well permit or well permit amendment. Permit amendment fees may apply. See <http://www.bcogc.ca/industry-zone/documentation/wells> Re-entries section in Well Drilling Guideline. See also [D&PR](#).
 - d. Plugging and abandoning: Included in drilling permit. See also [PNG Act s.120](#) (Abandonment).
3. Require filing report of work performed: Yes. D&PR ([Part 4 - Well Operation](#)), [s.8](#) – Notification of well construction and drilling operations. [D&PR Part 6](#) – Well and Other Data ([s.29](#) – [38](#)) outlines required reporting.
4. Sundry notices used: [D&PR – Part 4 - Well Operations](#), [s8](#). See also [s. 24](#), [26](#). See also [P&NG Act s.60 Notice to drill](#).

Vertical Deviation

1. Regulation requirement: [D&PR s. 33](#) Deviation and directional surveys. See also Well Drilling Guideline at www.bcogc.ca.

- a. When is a directional survey necessary: Deviation surveys must be made during drilling at intervals not exceeding 150 meters in depth, unless there are wellbore stability problems.
- b. Filing of survey required: Within 14 days of rig release.
- c. Format of filing: Electronic submission of directional survey data.

Casing and Tubing

1. Minimum amount required: [D&PR s.16](#), [17](#), [18](#), and [19](#).
 - a. Surface casing: Surface casing must be set at depth sufficient to provide competent anchor for blowout prevention equipment and to ensure control of anticipated well pressures. Annulus must be filled with cement to surface. See [D&PR s.16](#), [17](#), [18](#), and [19](#) for more.
 - b. Production casing: All reasonable measures must be taken to cement all intermediate and production casing to the surface or a min of 200 m above the shoe of the previous casing string. See [D&PR s.16](#), [17](#), [18](#), and [19](#) for more.
2. Minimum amount of cement required: See [D&PR s.16](#), [17](#), [18](#), and [19](#).
 - a. Surface casing: See [D&PR s.16](#), [17](#), [18](#), and [19](#) for more information on cement requirements and integrity.
 - b. Production casing: See [D&PR s.16](#), [17](#), [18](#), and [19](#) for more information on cement requirements and integrity.
 - c. Setting time: See [D&PR s.16](#), [17](#), [18](#), and [19](#) for more information on cement requirements and integrity.
3. Tubing requirements: [D&PR s.16](#) Tools, casing, equipment and materials
 - a. Oil wells: [D&PR s.16](#). Required if gas contains greater than 5 mole percent of hydrogen sulphide (H₂S).
 - b. Gas wells: [D&PR s.16](#). Required if gas contains greater than 5 mole percent of hydrogen sulphide (H₂S).

Hydraulic Fracturing

1. Permitting: [D&PR s.21](#) Fracturing Operations. Required if fracturing operation is shallower than 600 m below ground level.
 - a. Before drilling: Yes. [D&PR Part 4 – Well Operations s.8](#) Notification of well construction and drilling operations.
 - b. Before fracing: Notification required.

- c. How long before: Min 24 hours.
2. Reporting requirements: Yes. [D&PR s.37](#) Fracturing fluids records.
 - a. Where reported: BCOGC.
 - b. When reported: Within 30 days after the completion of the well.
3. Source water requirements: Yes. Water permits and licenses are issued by BCOGC. Sources of water are on record.
4. Mechanical integrity: [D&PR](#)
 - a. Cementing log required: [D&PR s.18\(7\)](#) If there is any reason to doubt the effectiveness of casing cementation, a well permit holder must ensure that a survey is made to evaluate the cement integrity and that remedial measures are taken if necessary.
 - b. Pressure testing: [D&PR s.10\(1\)\(a\)](#) pressure-control equipment associated with well operations is pressure-tested on installation and as often as necessary during well operations to ensure the continued safe operation of the equipment.
 - c. Pressure monitoring: [D&PR s.10\(3\)](#) A well permit holder must maintain, for 60 days from the date of rig release, a record of the results of tests required under subsection (1) (a). Standard practices include ongoing monitoring.
 - d. Blowout preventer required: [D&PR s.9](#) Well control equipment (equipment is installed to control kicks, prevent blow outs and safely carry out all well operations).
5. Disposal of flowback fluids: [D&PR s.51](#) and [52](#) outline requirements.
 - a. Retaining pits: See also [Information letter 09-07](#) Storage of Fluid Returns from Hydraulic Fracturing Operations.
 - b. Tanks: See also [Information letter 09-07](#) Storage of Fluid Returns from Hydraulic Fracturing Operations.
 - c. Approved discharge to surface water: No.
 - d. Underground injection: As per [Oil and Gas Waste Regulation s.7\(1\)](#) Requirements for discharges from specific operations. Operators are authorized to discharge produced water or recovered fluids in accordance with [OGAA s.70](#). Application to the Commission must be made for deep well disposal.
6. Chemical disclosure requirement: [S. 37 D&PR](#)

- a. Mandatory: Yes.
- b. Where disclosed: BC Oil and Gas Commission. (FracFocus.ca also houses provincial fracing information for public viewing).
- c. When disclosed (pre-fracing, post-fracing, both): Post.
- d. Time limit to disclose: Disclosure of records to the Commission is required within 30 days after the completion of the well.
- e. Information required to be disclosed: All (fluid description and purpose, ingredient concentration, chem abstract service number, total volume of water injected, trade name of supplier of ea ingredient).
- f. Trade secret protection: Yes. Hazardous Materials Information Review Commission (HMIRC).
- g. Required disclosure to health/emergency personnel: Yes.

Underground Injection

1. Agencies that control the underground injection of fluid by well class: BCOGC

Completion

1. Completion report required: Yes
 - a. Time limit: Within 30 days. [D&PR s. 36](#) Completion and Workover Reports.
 - b. Where submitted: BCOGC.
2. Well logs required to be filed: Yes – gamma ray, neutron, resistivity and porosity logs. See [D&PR s. 34](#) Tests, analyses, surveys and logs for exceptions.
 - a. Time limit: Within 30 days after the date on which a log was run.
 - b. Where submitted: BCOGC.
 - c. Confidential time period: Variable. See Oil and Gas Activities Act General Regulation (under OGAA), [Part 2 – Release of Information](#). See also [s. 17 Well reports and well data](#).
 - d. Available for public use: See Oil and Gas Activities Act General Regulation, [s. 17](#) Publication and availability of records and reports.
 - e. Log catalog available: See Oil and Gas Activities Act General Regulation, [Part 2 – Release of Information](#).

3. Multiple completion regulation: [D&PR s. 23](#) Multi-zone or commingled wells. [OGAA s. 75](#) Special projects.
 - a. Approval obtained: Must be permitted through well permit or authorized under [s. 75 of OGAA](#).
4. Commingling in well bore: May be permitted by way of [OGAA s 75](#). See also [D&PR Div. 4 s.23](#)
 - a. Approval obtained: BCOGC

Oil Production

1. Definition of an oil well: "oil" means petroleum as that term is defined in the *Petroleum and Natural Gas Act*. ('well' is further defined in the PNG Act).
2. Potential tests required: Yes. [D&PR Division 2 – Oil](#), and [Division 5 – Pressure Measurement](#). See also [Part 8: Production Operations – Div 1. Measurements](#).
 - a. Time interval: See [D&PR s. 58 Production test of oil wells](#)
 - b. Witness required: N/A. Records of production quantity tests must be kept.
3. Maximum gas-oil ratio: See [D&PR Division 2 – Oil, s.54 Daily oil allowable \(DOA\)](#).
 - a. Provision for limiting gas-oil ratio: See [D&PR s. 54](#) for variables.
 - b. Exception to limiting gas-oil ratio: Yes. [D&PR s.4](#) Exemptions for particular sites and installations from specified provisions.
4. Bottom-hole pressure test reports required: Yes. [D&PR Div 5 – Pressure Measurement](#).
 - a. Periodical bottom-hole pressure surveys: [D&PR s.73\(2\)](#) static bottom hole pressure of producing pools and observations wells measured once every calendar year.
5. Commingling oil in common facilities: A well permit holder must establish and maintain hydraulic isolation between all porous zones in a well, except for zones in which commingled production is permitted or authorized as described in [section 23 of the D&PR](#) - Multi-zone or commingled wells.
6. Measurement involving meters: [D&PR Division 2 – Oil](#). Well depth means true vertical depth, in meters, of lowest producing perf or open hole section in a zone. UDOA for an oil well is expressed in m³/day and rounded to one decimal place.
7. Production reports: Yes. [D&PR s.38](#) Production data.
 - a. By lease: By well.

- b. By well: Yes. [D&PR s.59](#) Calculation of oil production.
- c. Time limit: Yes. [D&PR s.59](#) Calculation of oil production.

Gas Production

1. Definition of a gas well: As per the PNG Act: means a well in which casing is run and that, in the opinion of the Commission, is producing or is capable of producing from a natural gas bearing zone.
2. Pressure base: See [D&PR s.64 Metering and measurement of gas](#). 14.7 psia @ 60 degrees F. / 101.325 KPa and 15 degrees C.
3. Initial potential tests: [D&PR Division 3 – Gas. S.63](#) Gas well tests.
 - a. Time interval: D&PR Tests, analyses, surveys and logs [s.34\(5\)](#) If initial production tests from a well allow good sampling, the well permit holder must submit to the Commission, within 30 days of analysis completion, a report of all analyses made of any gas recovered from each formation.
 - b. Witness required: N/A. Submission to Commission required.
4. Bottom-hole pressure test reports required: Yes. [D&PR Div 5 – Pressure Measurement](#).
 - a. Periodical bottom-hole pressure surveys: [D&PR s.73\(2\)](#) static bottom hole pressure of producing pools and observations wells measured once every calendar year.
5. Commingling of gas in common facilities: A well permit holder must establish and maintain hydraulic isolation between all porous zones in a well, except for zones in which commingled production is permitted or authorized as described in [section 23 of D&PR - Multi-zone or commingled wells](#).
6. Measurement involving meters: Yes. A measurement of a volume of gas required by the Act or this regulation must be computed as the number of cubic meters it would occupy at standard conditions of 101.325 kPa and 15°C.
7. Production reports: D&PR Tests, analyses, surveys and logs [s.34\(5\)](#) If initial production tests from a well allow good sampling, the well permit holder must submit to the commission, within 30 days of analysis completion, a report of all analyses made of any gas recovered from each formation.
 - a. By lease: By well.
 - b. By well: Yes.
 - c. Time limits: 30 days.

** The Petroleum and Natural Gas Royalty and Freehold Production Tax Regulation under the PNG Act provides additional definitions/clarity regarding measurements and production.*