



Province of Alberta

## MINES AND MINERALS ACT

# NATURAL GAS DEEP DRILLING REGULATION, 2010

### **Alberta Regulation 198/2010**

With amendments up to and including Alberta Regulation 157/2016

### Office Consolidation

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(Consolidated up to 157/2016)

**ALBERTA REGULATION 198/2010**

**Mines and Minerals Act**

**NATURAL GAS DEEP DRILLING REGULATION, 2010**

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Schedule

**Definitions**

**1(1)** In this Regulation,

- (a) "abandoned well" means a well classified as an abandoned well by the Regulator;
- (b) "Act" means the *Mines and Minerals Act*;
- (c) repealed AR 89/2013 s46;
- (d) "Crown interest" means the percentage of Crown ownership of gas recovered or obtained as determined by the Minister in accordance with section 26.1 of the *Petroleum and Natural Gas Tenure Regulation* (AR 263/97);
- (e) "crude oil" means crude oil as defined in the *Natural Gas Royalty Regulation, 2009* (AR 221/2008);

- (f) “deepening” means the drilling of a well event below the true vertical depth referred to in the licence for the well event, pursuant to an amendment to the licence;
- (g) “development well” means a well determined by the Minister to be a development well based on the well being classified by the Regulator as a development well, an outpost well or a re-entry well;
- (h) “drilling spacing unit” means a drilling spacing unit as defined in the *Natural Gas Royalty Regulation, 2009* (AR 221/2008);
- (i) “eligible well” means an eligible well described in section 3;
- (j) “eligible well event” means a well event contained in an eligible well that has a Crown interest greater than 0%;
- (k) “exploratory well” means a well determined by the Minister to be an exploratory well based on the well being classified by the Regulator as a new field wildcat well, a new pool wildcat well or a deeper pool test well;
- (l) “field condensate” means field condensate as defined in the *Natural Gas Royalty Regulation, 2009* (AR 221/2008);
- (m) “finished drilling date” means a finished drilling date for a well event according to the records of the Regulator;
- (n) “former regulation” means the *Natural Gas Royalty Regulation, 2002* (AR 220/2002) or the *Natural Gas Deep Drilling Regulation* (AR 224/2008);
- (o) “gas” means natural gas, residue gas, gas products and field condensate;
- (p) “gas product” means gas product as defined in the *Natural Gas Royalty Regulation, 2009* (AR 221/2008);
- (q) “lengthening” means increasing the measured depth of a well event referred to in the licence for the well, pursuant to an amendment to the licence;
- (r) “licence” means a licence for a well issued under the *Oil and Gas Conservation Act*;
- (s) “licensee”, in relation to a well, means the holder of the licence in respect of that well under the *Oil and Gas Conservation Act*;

- (t) “measured depth” means, for each well event, the longest distance in metres according to the records of the Regulator, measured along the bore of the well from the kelly bushing of the well to the base of the deepest producing interval that the well event is, in the opinion of the Minister, producing natural gas in paying quantities;
- (u) “operator”, with reference to a well, means the person who is the operator of the well according to the records of the Department;
- (v) “pool” means a pool as defined in the *Oil and Gas Conservation Act*;
- (x) “producing interval” means a perforation from which production is obtained;
- (x.1) “Regulator” means the Alberta Energy Regulator;
- (y) “residue gas” means residue gas as defined in the *Natural Gas Royalty Regulation, 2009* (AR 221/2008);
- (z) “shortening” means decreasing the measured depth of a well event where the base of the deepest natural gas producing interval in the well event that is producing in paying quantities has a true vertical depth greater than 2000 metres but is shallower than the most recent measured depth determined previously for that well event;
- (aa) “true vertical depth” means, for each well event, the vertical distance in metres measured in a perpendicular line from the kelly bushing of a well to the base of the deepest producing interval that the well event is, in the opinion of the Minister, producing natural gas in paying quantities;
- (bb) “twin well”, in relation to an eligible well, means a well that is
  - (i) spud on or after May 1, 2010 and on or before December 31, 2016,
  - (ii) located in the same legal subdivision or drilling spacing unit, whichever is of lesser area, as that in which the eligible well is located, and
  - (iii) drilled to produce gas that, in the opinion of the Minister, is not initially recoverable from the eligible well due to inadvertent damage to the well;

- (cc) “unit area” means a unit area as defined in the *Natural Gas Royalty Regulation, 2009* (AR 221/2008);
- (dd) “value of the adjusted royalty quantity”, in relation to an eligible well, means the aggregate of the amounts of royalty compensation that would have been payable under the *Natural Gas Royalty Regulation, 2009* (AR 221/2008) in respect of the Crown’s royalty share of gas recovered or obtained from each eligible well event in that well in the absence of
- (i) any royalty exemption, adjustment or reduction under another current or former regulation, and
  - (ii) any royalty adjustment under this Regulation
- applied to that well event, or to the well that contains that well event, and without any deductions for allowable costs;
- (ee) “well event” means a well event as defined in the *Natural Gas Royalty Regulation, 2009* (AR 221/2008).

(2) A reference to the true vertical depth or measured depth of a well event in this Regulation is a reference to the depth of the well event in metres according to the records of the Regulator.

AR 198/2010 s1;89/2010;157/2016

### Application of regulation

2 This Regulation applies to royalty on gas recovered or obtained from an eligible well on or after May 1, 2010 and on or before December 31, 2021.

AR 198/2010 s2;157/2016

### Eligible well

3(1) Subject to subsection (3), an eligible well is a well that

- (a) is spud or deepened on or after May 1, 2010 and on or before December 31, 2016,
- (b) is an exploratory well or a development well,
- (c) contains a producing interval, the base of which is greater than a true vertical depth of 2000 metres, and
- (d) has a Crown interest greater than 0%.

(2) Additional information must be provided to the Minister by the operator or licensee if required to aid in determining that a well meets the requirements of subsection (1).

- (3) A well is not an eligible well if
- (a) subject to section 9, that well, or any well event in that well, has been the subject of a royalty exemption, adjustment or reduction under any former regulation,
  - (b) that well initially produces oil either alone or with gas at a gas oil ratio of less than 1800:1,
  - (c) that well produces oil sands or crude bitumen, other than a gas well as defined in the *Oil and Gas Conservation Rules* (AR 151/71),
  - (d) it is a well whose production of crude oil or crude bitumen is exempt from royalty under the *Third Tier Exploratory Well Royalty Exemption Regulation* (AR 16/93) or eligible for a royalty adjustment under the *Deep Oil Exploratory Well Regulation* (AR 225/2008) and that exemption or adjustment has not been wholly revoked, or
  - (e) that well is a re-entry into an abandoned well.

AR 198/2010 s3;89/2010;157/2016

#### **Nature of royalty adjustment**

**4(1)** The royalty otherwise payable to the Crown on gas recovered or obtained from each eligible well event is adjusted in accordance with this section.

(2) Subject to subsection (3),

- (a) the royalty rate on natural gas recovered, or on residue gas or on gas products obtained from natural gas, from eligible well events on or after May 1, 2010 and on or before December 31, 2021, is reduced to 5%, and
- (b) the royalty rate on field condensate obtained from natural gas recovered from eligible well events on or after May 1, 2010 and on or before December 31, 2021 is reduced to 0%.

(3) Subsection (2)(a) and (b) do not apply to the last production month that a royalty reduction is applicable if there is not enough remaining in the total amount of royalty adjustment for the well, as calculated under subsection (7), to reduce the royalty rate for each well event in that well to 5% or 0%, as the case may be.

(4) The total royalty adjustment amount for an eligible well classified as a development well is the aggregate amount as determined under the Schedule.

(5) The total royalty adjustment amount for an eligible well classified as an exploratory well is the aggregate amount as determined under the Schedule.

(6) When the total royalty adjustment amount is determined for an eligible well under subsection (4) or (5), that amount is reduced each month by the total difference in the value of the adjusted royalty quantity for that well and the total royalty compensation determined as a result of the reduced royalty rate under subsection (2)(a) or (b), as applicable, for all eligible well events in that well, commencing with the first month of production from each eligible well event until

- (a) the total royalty adjustment amount is reduced to zero,
- (b) 5 years from the first finished drilling date of the eligible well has expired, or
- (c) December 31, 2021,

whichever occurs first.

(7) A royalty adjustment

- (a) does not apply in respect of any month that occurs after the 5-year period following the finished drilling date applicable to the drilling, deepening, lengthening or shortening of an eligible well,
- (b) terminates effective as of the date an eligible well is abandoned,
- (c) does not apply in respect of any month in which an eligible well does not have production of gas from an eligible well event, and
- (d) does not apply after December 31, 2021.

(8) Where an eligible well has more than one eligible well event with a producing interval, the base of which has a true vertical depth greater than 2000 metres,

- (a) for each month the royalty adjustment for the eligible well will be based on the eligible well event with the greatest measured depth that is producing gas,
- (b) if the eligible well event in clause (a) fails to produce gas in any month, the royalty adjustment will be based on the eligible well event producing gas that has the next deepest measured depth and has a producing interval, the base of which has a true vertical depth greater than 2000 metres, and

- (c) the additional measured depth of all other eligible well events with a true vertical depth greater than 2000 metres will be added to the royalty adjustment in accordance with the Schedule.

AR 198/2010 s4;157/2016

### **Determinations by Minister**

#### **5(1) If**

- (a) an eligible well event is drilled or deepened below a true vertical depth of 2000 metres to a new measured depth that is below the base of the natural gas bearing interval of the deepest producing interval from which the well event was, in the opinion of the Minister, producing gas in paying quantities, and
- (b) the Minister is satisfied that the gas recovered or obtained from a pool in the deeper interval is subsequently recovered or obtained in paying quantities,

the Minister may determine a new measured depth for the eligible well event and a new total royalty adjustment amount for the eligible well.

**(2)** If the Minister determines a new measured depth pursuant to subsection (1), the royalty otherwise payable to the Crown on gas recovered or obtained from the eligible well event, determined by the Minister, is eligible for a royalty adjustment in accordance with section 4.

**(3)** If an eligible well event has received a royalty adjustment under this Regulation and, in accordance with subsection (1),

- (a) that well event is subsequently deepened,
- (b) the deepening results in a new measured depth, and
- (c) the new measured depth results in a new total royalty adjustment amount calculated for the well,

the new total royalty adjustment amount applied to the well

- (d) is the total royalty adjustment amount, and
- (e) shall be applied as of the effective date of the deepening,

and the finished drilling date of the eligible well is deemed to be the latest finished drilling date as a result of the deepening of the well event.

**(4)** If an eligible well event has received a royalty adjustment under this Regulation and

- (a) that well event is subsequently lengthened or shortened,
- (b) the lengthening or shortening results in a new measured depth as determined by the Minister, and
- (c) the new measured depth results in a new total royalty adjustment amount calculated for the well,

the new total royalty adjustment amount applied to the well

- (d) is the total royalty adjustment amount, and
- (e) shall be applied as of the effective date of the lengthening or shortening,

and the finished drilling date of the eligible well is deemed to be the first finished drilling date of the well before the well event was lengthened or shortened.

**(5)** If the new total royalty adjustment amount determined for an eligible well under subsection (3) or (4) is less than the amount of royalty adjustment already received by that well as of the effective date of the new total royalty adjustment, that well shall not receive any further royalty adjustments.

**(6)** If an eligible well is receiving a royalty adjustment under this Regulation and that well subsequently becomes part of a unit area,

- (a) the Crown interest of each well event in that well is the Crown interest under the unit area, effective as of the date of the unit area,
- (b) the Minister shall determine whether or not that well or well event is an eligible well or eligible well event as of the effective date of the unit area,
- (c) the total royalty adjustment amount determined for that well does not change, and
- (d) the amounts that well received in royalty adjustments prior to the well becoming part of a unit area do not change.

**(7)** If an eligible well is receiving a royalty adjustment under this Regulation and the Crown interest in that well, or in any well event in that well, subsequently changes for a reason other than becoming part of a unit area as described under subsection (6), the Crown interest is adjusted accordingly, and there is no change to the total royalty adjustment amount determined for that well, or to the

amounts that well received in royalty adjustments prior to the change in Crown interest.

#### **Transfer of royalty adjustment**

**6(1)** The Minister may approve the transfer of a royalty adjustment in section 4 or 5 from an eligible well to its twin well.

**(2)** If the Minister approves the transfer of a royalty adjustment pursuant to subsection (1),

- (a) the royalty adjustment on gas recovered or obtained from the eligible well from which the royalty adjustment was transferred terminates on the effective date of the transfer of the royalty adjustment to the twin well, and
- (b) the royalty adjustment period applicable to the twin well is the balance of the royalty adjustment period that would have been applicable to the eligible well from which the royalty adjustment was transferred.

#### **Factors affecting adjustment or determination**

**7** If, in respect of an eligible well or a twin well, the Minister is of the opinion that

- (a) gas recovered or obtained from an eligible well or a twin well subject to royalty adjustment has resulted in a material reduction of gas recovered or obtained from another well that is not subject to a royalty adjustment,
- (b) there are circumstances that, had they been known when the approval of a transfer of a royalty adjustment to a twin well was made, would have resulted in a refusal to allow the transfer,
- (c) there are circumstances that, had they been known when a determination under section 5 was made, would have resulted in a refusal to make the determination,
- (d) a provision of this Regulation has not been complied with,
- (e) compliance with section 47(6) of the Act in connection with an audit or examination relating to a royalty adjustment in respect of an eligible well was inadequate, or
- (f) one or more acts, agreements, arrangements, transactions or operations were, before or after the coming into force of this Regulation, effected for the purpose of improperly,

artificially or unduly obtaining or increasing a royalty adjustment,

the Minister may determine that gas recovered or obtained in respect of a well is not eligible in whole or in part for the royalty adjustment, may revoke a royalty adjustment in whole or in part and may disallow the transfer of a royalty adjustment to a twin well.

#### **Reporting circumstances affecting eligibility**

**8** A person who has received a royalty adjustment shall forthwith notify the Minister in writing on learning of any circumstances that indicate the well or well event from which gas was recovered or obtained was not eligible for the royalty adjustment in whole or in part.

#### **Transition wells**

**9(1)** A well that is eligible for, or received a royalty exemption or royalty adjustment under a former regulation is eligible for a royalty adjustment under this Regulation if it is an eligible well and if it meets the following criteria:

- (a) the well was spud or commenced deepening on or after October 25, 2007 and on or before April 30, 2010;
- (b) the well is not a well described under section 3(3);
- (c) the well, or a well event in that well, has an unused royalty exemption or royalty adjustment under the former regulation.

**(2)** The total amount of royalty adjustment is calculated for a transition well as if it were an eligible well under this Regulation but the total royalty adjustment amount is then reduced by the amount of royalty exemption or adjustment received by the well, or by all well events in that well, under a former regulation.

#### **Minister's decision final**

**10** Where any question arises pertaining to the interpretation or application of this Regulation, the Minister is the sole judge of the question and there is no appeal from the Minister's decision.

**11** Repealed AR 157/2016 s6.

**Expiry**

**12** This Regulation expires on June 30, 2027.

AR 198/2010 s12;157/2016

**Coming into force**

**13** This Regulation is deemed to have come into force on May 1, 2010.

**Schedule****Additional measured depth**

**1(1)** The additional measured depth for an eligible well is

- (a) the sum of the lengths, in metres, of all well events in the eligible well with a true vertical depth greater than 2000 metres but not more than 3500 metres, measured from the kick off point to the deepest natural gas producing interval of each well event, and
- (b) the sum of the lengths, in metres, of all well events in the eligible well with a true vertical depth greater than 3500 metres, measured from the kick off point to the deepest natural gas producing interval of each well event.

**(2)** In calculating the additional measured depth for an eligible well under subsection (1),

- (a) each well event must be counted only once, and
- (b) the measured depth calculated for the well event referred to in section 4(8)(a) or (b) of this Regulation must not be included.

**Development wells**

**2(1)** The total royalty adjustment for a well described as an eligible well under section 3(1) of this Regulation and classified as a development well is determined in accordance with the following formula:

$$\text{total royalty adjustment} = A+B+C+D+E+F+G$$

where

- A is the number of metres of the measured depth more than 2000 but not more than 3500, multiplied by \$625 per metre;

- B is the number of metres of the measured depth more than 3500 but not more than 4000, multiplied by \$2500 per metre;
- C is the number of metres of the measured depth more than 4000 but not more than 5000, multiplied by \$2500 per metre;
- D is the number of metres of the measured depth more than 5000, multiplied by \$3000 per metre;
- E is the number of metres of additional measured depth calculated in section 1(1)(a) of this Schedule, multiplied by \$625 per metre;
- F is the number of metres of additional measured depth calculated in section 1(1)(b) of this Schedule, multiplied by \$2500 per metre;
- G is the supplemental royalty adjustment determined under subsection (2) for eligible wells spud or deepened on or before May 27, 2010.

(2) The supplemental royalty adjustment is as follows:

- (a) if the measured depth is less than 4000 metres, \$0;
- (b) if the measured depth is 4000 metres or more, \$875 000.

(3) The maximum royalty adjustment is \$8 000 000.

### Exploratory wells

**3(1)** The total royalty adjustment for a well described as an eligible well under section 3(1) of this Regulation and classified as an exploratory well is determined in accordance with the following formula:

$$\text{total royalty adjustment} = A+B+C+D+E+F+G$$

where

- A is the number of metres of the measured depth more than 2000 but not more than 3500, multiplied by \$625 per metre;
- B is the number of metres of the measured depth more than 3500 but not more than 4000, multiplied by \$2500 per metre;

- C is the number of metres of the measured depth more than 4000 but not more than 5000, multiplied by \$3125 per metre;
- D is the number of metres of the measured depth more than 5000, multiplied by \$3750 per metre;
- E is the number of metres of additional measured depth calculated in section 1(1)(a) of this Schedule, multiplied by \$625 per metre;
- F is the number of metres of additional measured depth calculated in section 1(1)(b) of this Schedule, multiplied by \$2500 per metre;
- G is the supplemental royalty adjustment determined under subsection (2) for eligible wells spud or deepened on or before May 27, 2010.
- (2)** The supplemental royalty adjustment is as follows:
- (a) if the measured depth is less than 4000 metres, \$0;
  - (b) if the measured depth is 4000 metres or more, \$875 000.
- (3)** The maximum royalty adjustment is \$10 000 000.



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