

Reprint  
as at 1 September 2017



## **Crown Minerals (Petroleum) Regulations 2007** (SR 2007/138)

Anand Satyanand, Governor-General

### **Order in Council**

At Wellington this 28th day of May 2007

Present:

His Excellency the Governor-General in Council

Pursuant to section 105(1) of the Crown Minerals Act 1991, His Excellency the Governor-General, acting on the advice and with the consent of the Executive Council, makes the following regulations.

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#### **Note**

Changes authorised by subpart 2 of Part 2 of the Legislation Act 2012 have been made in this official reprint.  
Note 4 at the end of this reprint provides a list of the amendments incorporated.

**These regulations are administered by the Ministry of Business, Innovation, and Employment.**

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## Regulations

### 1 Title

These regulations are the Crown Minerals (Petroleum) Regulations 2007.

### 2 Commencement

These regulations come into force on 1 July 2007.

### 3 Interpretation

(1) In these regulations, unless the context otherwise requires,—

**Act** means the Crown Minerals Act 1991

**calendar year** means a period of 12 months ending with 31 December

**co-ordinates** means—

- (a) latitude and longitude values and their geodetic datum; or
- (b) eastings and northings and their geodetic datum and projection

**document** means—

- (a) any material, whether or not it is signed or otherwise authenticated, that bears symbols (including words and figures), images, or sounds or from which symbols, images, or sounds can be derived, and includes—
  - (i) a label, marking, or other writing that identifies or describes a thing of which it forms part, or to which it is attached;
  - (ii) a book, report, return, map, plan, graph, or drawing;
  - (iii) a photograph, film, or negative; and
- (b) information electronically recorded or stored, and information derived from that information

**enclave** means an area of land within the boundaries of a permit area or proposed permit area which, for the purposes of the permit or proposed permit, is to be treated as being excluded from the permit area or proposed permit area

**form prescribed by the chief executive** includes, where applicable, also in the manner prescribed by the chief executive

**gas**—

- (a) means all gaseous petroleum capable of being produced from wells; and
- (b) includes wet gas and residual gas remaining after the extraction of condensate from wet gas

**map** has the meaning set out in regulation 4

**particulars** means a person's full name, address for service, email address, and contact telephone number

**permit** means a permit in respect of petroleum

**permit area**,—

- (a) in relation to an application for a permit, means the unbroken area (bounded by defined lines and any coastline, sovereign, territorial, or other boundary) to which the application relates; and
- (b) in any other case, means the unbroken area (bounded by defined lines and any coastline, sovereign, territorial, or other boundary) in relation to which the permit holder concerned has been granted a permit

**Petroleum Resources Management System** means the system of that name developed and published by the Society of Petroleum Engineers and available on the Society's Internet site

**prescribed fee** means the fee payable under the Crown Minerals (Petroleum Fees) Regulations 2006

**reference number**, in relation to a permit, means any unique identifying number for the permit that the chief executive may allocate to it for the purposes of section 91 of the Act

**survey** means a survey, investigation, or specialised study undertaken in relation to a permit area or samples from a permit area

**turning points** has the meaning set out in regulation 5

**well**—

- (a) means a borehole drilled for the purpose of exploring for, appraising, or obtaining petroleum; and
  - (b) includes a borehole producing or associated with producing petroleum.
- (1A) For the purposes of these regulations, a **discovery** is established in the circumstances where there are significant moveable hydrocarbons present in the drilling column resulting from exploration or appraisal well-drilling, or well-stimulation, and the moveable hydrocarbons are related to a subsurface deposit that can be established through testing, sampling, or logging.
- (2) Unless the context otherwise requires, any term used but not defined in these regulations, but defined in the Act, has the same meaning as in the Act.

Regulation 3(1) **accounting profits royalty**: revoked, on 24 May 2013, by regulation 4(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 3(1) **ad valorem royalty**: revoked, on 24 May 2013, by regulation 4(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 3(1) **calendar year**: inserted, on 24 May 2013, by regulation 4(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 3(1) **form prescribed by the chief executive**: inserted, on 24 May 2013, by regulation 4(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 3(1) **half-year**: revoked, on 24 May 2013, by regulation 4(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 3(1) **net sales revenue**: revoked, on 24 May 2013, by regulation 4(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 3(1) **permit**: inserted, on 11 June 2009, by regulation 4 of the Crown Minerals (Petroleum) Amendment Regulations 2009 (SR 2009/126).

Regulation 3(1) **Petroleum Resources Management System**: inserted, on 24 May 2013, by regulation 4(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 3(1) **quarter-year**: revoked, on 24 May 2013, by regulation 4(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 3(1) **reference number**: amended, on 24 May 2013, by regulation 47(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 3(1A): inserted, on 24 May 2013, by regulation 4(3) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### **4 Definition of map**

In these regulations, unless the context otherwise requires, **map**,—

- (a) in relation to a permit area, means a map or plan of the area that—
  - (i) locates and defines the boundaries of the permit area by—
    - (A) lines of latitude or longitude, if practicable to do so; or
    - (B) straight line edges between turning points, in any other case; and
  - (ii) enables the boundaries of the permit area to be accurately located and relocated; and
  - (iii) identifies any enclaves; and
  - (iv) if the permit area abuts an existing permit area, coastline, or sovereign, territorial, or other boundary, identifies the source and definition of the boundary and the extent of it; and
  - (v) satisfies the requirements of paragraph (b); and
  - (vi) complies with any other express requirements in these regulations:
- (b) in any other case, means a map or plan that includes—
  - (i) a graticule of—
    - (A) the geographic co-ordinates (latitude and longitude); or
    - (B) the projected co-ordinate grid (easting and northing); or

- (C) both; and
- (ii) a scale that uses an appropriate standard metric representative fraction or a metric graphic bar scale; and
- (iii) direction or compass indicators; and
- (iv) title and reference information, including—
  - (A) a note identifying the datum and projection used for the map or plan; and
  - (B) a descriptive title; and
  - (C) the publisher's name and the place and date of the map's or plan's publication; and
  - (D) the source and currency of any reference, derived, or interpreted data (for example, cadastral, topographic, or photographic data); and
  - (E) a legend; and
- (v) any relevant permit area boundaries; and
- (vi) any other information that will aid in the relocation of the area to which the map or plan relates.

## **5 Definition of turning points**

- (1) In these regulations, **turning points**, in relation to locating and defining the boundaries of an area of land on a map or plan, means the inflection points or angles that, when joined by straight line edges, define the area of land on the map or plan.
- (2) For the purposes of these regulations, turning points must be described using the official geodetic datum for the time being approved by the Surveyor-General.
- (3) For the purposes of these regulations, turning points must be rounded to the nearest minute.

Regulation 5(3): inserted, on 24 May 2013, by regulation 5 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **Part 1**

### **Matters relating to documents and other required information**

Part 1 heading: replaced, on 24 May 2013, by regulation 6 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **6 Signing of documents**

- (1) An application made by 2 or more persons for a permit under these regulations, and any other document required to be signed that is part of the application, must be signed by—

- (a) each person; or
  - (b) a person authorised to sign on behalf of each person.
- (2) A document required to be signed by a permit holder under these regulations must, if the permit holder comprises 2 or more permit participants, be signed by—
- (a) each permit participant; or
  - (b) a person authorised to sign on behalf of each permit participant.
- (3) A document that is required to be signed under these regulations may be signed in accordance with section 226 of the Contract and Commercial Law Act 2017.
- Regulation 6(2): replaced, on 24 May 2013, by regulation 7 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).
- Regulation 6(3): amended, on 1 September 2017, by section 347 of the Contract and Commercial Law Act 2017 (2017 No 5).

#### **7 Form of documents if not prescribed by chief executive**

- (1) This regulation applies if any information, document, or other thing must be provided in a form prescribed by the chief executive and no such form has been prescribed.
- (2) The information, document, or other thing must nevertheless be provided in a form and in a manner acceptable to the chief executive.

Regulation 7: replaced, on 24 May 2013, by regulation 8 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### *Format requirements*

*[Revoked]*

Heading: revoked, on 24 May 2013, by regulation 8 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### **8 Written documents**

*[Revoked]*

Regulation 8: revoked, on 24 May 2013, by regulation 8 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### **9 Documents must be provided to Secretary electronically**

*[Revoked]*

Regulation 9: revoked, on 24 May 2013, by regulation 8 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### **10 Headers for digital seismic survey data**

Digital data collected from any seismic survey must include in the headers—

- (a) the survey name:
- (b) the line name for two-dimensional surveys or in-line range for three-dimensional surveys:

- (c) the date the data was acquired:
- (d) the acquisition company (including the name of the vessel or crew) and the acquisition parameters of the survey:
- (e) the processing information, including—
  - (i) the processing sequence; and
  - (ii) the time correction; and
  - (iii) the gain curve; and
  - (iv) the bandpass filter; and
  - (v) the polarity and phase:
  - (vi) the details of the legal person (not an individual) that undertook the processing:
  - (vii) the year of processing:
  - (viii) the seismic reference datum:
  - (ix) the data type (stack or gather):
- (f) the projection, datum, spheroid, and co-ordinate units:
- (g) the sample interval:
- (h) the shot-to-trace relationship for two-dimensional surveys:
- (i) the trace length:
- (j) the trace header format:
- (l) for two-dimensional data, the trace header byte locations for shot points, common depth points, or station locations, and the X and Y co-ordinate locations:
- (k) for three-dimensional data, the trace header byte locations for in-line and crossline numbers, and the X and Y co-ordinate locations:
- (m) for three-dimensional surveys, the corner points:
- (n) if data was processed, how it was processed.

Regulation 10: replaced, on 24 May 2013, by regulation 9 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **11 Form specified or described on website is acceptable to Secretary**

*[Revoked]*

Regulation 11: revoked, on 24 May 2013, by regulation 10 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **12 Secretary may dispense with regulation 9 requirements**

*[Revoked]*

Regulation 12: revoked, on 24 May 2013, by regulation 10 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

*Extensions and exemptions*

*[Revoked]*

Heading: revoked, on 24 May 2013, by regulation 11 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**13 Permit holder may apply for extension of time within which document or thing must be provided**

- (1) A permit holder may apply to the chief executive, in writing, to extend the period of time within which the permit holder must provide to the chief executive any document or thing under these regulations.
- (2) The chief executive must—
  - (a) grant the application (on any terms that he or she thinks fit); or
  - (b) reject the application.
- (3) This regulation does not apply to any document or thing to be provided under regulation 45.

Regulation 13(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 13(2): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 13(3): amended, on 24 May 2013, by regulation 12 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**14 Permit holder may apply for exemption from requirement to provide document or thing**

- (1) A permit holder may apply to the chief executive, in writing, for an exemption from providing to the chief executive any document or thing required to be provided by the permit holder to the chief executive under these regulations.
- (2) The chief executive must—
  - (a) grant the application if he or she is satisfied that it is not reasonable or practicable for the permit holder to provide the document or thing; or
  - (b) reject the application.
- (3) This regulation does not apply to any document or thing to be provided under regulation 45.

Regulation 14(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 14(2): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 14(3): amended, on 24 May 2013, by regulation 13 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

*Prescribed forms**[Revoked]*

Heading: revoked, on 24 May 2013, by regulation 14 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**15 Prescribed forms***[Revoked]*

Regulation 15: revoked, on 24 May 2013, by regulation 14 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

*Prescribed information**[Revoked]*

Heading: revoked, on 24 May 2013, by regulation 15 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**16 Prescribed information for purposes of section 90B(1) of Act**

The information provided under regulation 39(2)(b) that relates to items 1, 17, 18, 21, and 23 of Part 2 of Schedule 6 is prescribed information for the purposes of section 90B(1) of the Act.

Regulation 16 heading: amended, on 24 May 2013, by regulation 16(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 16: amended, on 24 May 2013, by regulation 16(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**Part 2****Permit applications and notices***Applications***17 Application for prospecting permit**

- (1) An application to the chief executive under section 23A of the Act for a prospecting permit must be in the form prescribed by the chief executive and signed by the applicant.
- (2) The application must be accompanied by—
  - (a) the prescribed fee or evidence of it having been paid; and
  - (b) the information described in Part 1 of Schedule 2.

Regulation 17(1): amended, on 24 May 2013, by regulation 17 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 17(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**18 Application for exploration permit (unless allocated by public tender)**

*[Revoked]*

Regulation 18: revoked, on 24 May 2013, by regulation 18 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**19 Application for mining permit (unless allocated by public tender)**

- (1) An application to the chief executive under section 23A of the Act for a mining permit must be in the form prescribed by the chief executive and signed by the applicant.
- (2) The application must be accompanied by—
  - (a) the prescribed fee or evidence that it has been paid; and
  - (b) the information described in Part 2 of Schedule 2.
- (3) This regulation does not apply to any process by which a permit is offered for allocation by public tender under section 24 of the Act.

Regulation 19(1): amended, on 24 May 2013, by regulation 19(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 19(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 19(2): replaced, on 24 May 2013, by regulation 19(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**20 Application to extend area to which permit relates**

- (1) An application to the Minister under section 36(1) of the Act to extend the area of land to which an existing permit relates must be signed by the permit holder and accompanied by—
  - (a) the prescribed fee or evidence of it having been paid; and
  - (b) the reference number of the permit concerned; and
  - (c) a report that includes the information described in—
    - (i) subpart 1 of Part 3 of Schedule 2, if the application is to extend the area of land to which a permit relates following a discovery; or
    - (ii) subpart 2 of Part 3 of Schedule 2, if the application is to extend the area of land for an exploration permit and no discovery has been made.

(d) *[Revoked]*

- (2) The application and accompanying material must be lodged with the chief executive.

(3) *[Revoked]*

Regulation 20(1)(c): replaced, on 24 May 2013, by regulation 20(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 20(1)(d): revoked, on 24 May 2013, by regulation 20(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 20(2): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 20(3): revoked, on 24 May 2013, by regulation 20(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **21 Application to extend duration of exploration permit (unless for purpose of discovery appraisal)**

- (1) An application to the Minister under clause 7 of Schedule 1 of the Act to extend the duration of an exploration permit must be signed by the permit holder and accompanied by—
  - (a) the prescribed fee or evidence of it having been paid; and
  - (b) the reference number of the permit concerned; and
  - (c) a statement of the duration of the extension sought; and
  - (d) a map of the existing permit area showing the boundaries of the area of land within it to which the extension of duration relates; and
  - (e) a statement of the proposed work programme, including—
    - (i) its objectives; and
    - (ii) a discussion of any options proposed for surrender of the permit and when they may be exercised.
- (2) The application and accompanying material must be lodged with the chief executive.
- (3) For the purposes of subclause (1)(d), the boundaries of the area of land to which the extension relates must be located and defined on the map by—
  - (a) lines of latitude or longitude, if practicable to do so; or
  - (b) straight line edges between turning points, in any other case.
- (4) *[Revoked]*

Regulation 21(1): amended, on 24 May 2013, by regulation 21(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 21(4): revoked, on 24 May 2013, by regulation 21(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **22 Application to extend duration of exploration permit for purpose of discovery appraisal**

- (1) An application to the Minister under section 35A of the Act to extend the duration of an exploration permit for the purpose of appraising a discovery must be signed by the permit holder and accompanied by—
  - (a) the prescribed fee or evidence of it having been paid; and
  - (b) the reference number of the permit concerned; and
  - (c) *[Revoked]*
  - (d) *[Revoked]*

- (e) *[Revoked]*
  - (f) subject to subclause (4), a report that includes the information described in Schedule 4.
- (2) The application and accompanying material must be lodged with the chief executive.
- (3) *[Revoked]*
- (4) A report for the purposes of subclause (1)(f) is not required to include all of the information described in Schedule 4 if—
- (a) the permit holder concerned asks the chief executive, in writing, for permission to omit from the report certain information described in that schedule; and
  - (b) the chief executive grants the request, in writing, on the grounds that he or she is satisfied that—
    - (i) the permit holder does not have the information; or
    - (ii) the permit holder does not have the information in an appropriate form; or
    - (iii) it would be unreasonable to require the permit holder to provide the information.

Regulation 22(1): amended, on 24 May 2013, by regulation 22(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 22(1)(c): revoked, on 24 May 2013, by regulation 22(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 22(1)(d): revoked, on 24 May 2013, by regulation 22(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 22(1)(e): revoked, on 24 May 2013, by regulation 22(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 22(2): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 22(3): revoked, on 24 May 2013, by regulation 22(3) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 22(4)(a): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 22(4)(b): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **23 Application to extend duration of mining permit**

- (1) An application to the Minister under section 36(1) of the Act to extend the duration of a mining permit must be signed by the permit holder and accompanied by—
- (a) the prescribed fee or evidence of it having been paid; and
  - (b) the reference number of the permit concerned; and
  - (c) the information described in Part 4 of Schedule 2; and

- (d) *[Revoked]*
  - (e) *[Revoked]*
  - (f) a report that includes so much of the information described in Part 2 of Schedule 2 as relates to an application under this regulation.
- (2) The application and accompanying material must be lodged with the chief executive.

Regulation 23(1)(c): replaced, on 24 May 2013, by regulation 23(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 23(1)(d): revoked, on 24 May 2013, by regulation 23(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 23(1)(e): revoked, on 24 May 2013, by regulation 23(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 23(1)(f): amended, on 24 May 2013, by regulation 23(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 23(2): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **24 Application and notices to transfer, deal with, etc, permit**

- (1) This regulation applies to the following applications and notices:
- (a) an application to transfer all or part of a participating interest in a permit under section 41 of the Act:
  - (b) a notice of change of control of a permit participant or a guarantor under section 41A of the Act:
  - (c) an application for consent to a dealing with the permit under section 41B of the Act:
  - (d) an application for consent to a change of permit operator under section 41C of the Act.
- (2) An application or a notice must—
- (a) be signed by the permit holder or permit participant, as the case may be; and
  - (b) be in the form prescribed by the chief executive.
- (3) The application or notice must be accompanied by—
- (a) the prescribed fee or evidence of it having been paid; and
  - (b) the information required under section 41, 41A, 41B, or 41C of the Act, as the case may be.
- (4) The application or notice and accompanying material must be lodged with the chief executive.

Regulation 24: replaced, on 24 May 2013, by regulation 24 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **25 Application to amend conditions of permit**

- (1) An application to the Minister under section 36(1) of the Act for his or her consent to amend 1 or more conditions of a permit must—
  - (a) be in writing and signed by the permit holder concerned; and
  - (b) be lodged with the chief executive; and
  - (c) include the following information:
    - (i) the reference number of the permit; and
    - (ii) details of the proposed amendment or amendments to the permit conditions; and
    - (iii) the reasons why, in the permit holder's opinion, the Minister should amend the permit condition or conditions.
- (2) The application must be accompanied by—
  - (a) the prescribed fee or evidence of it having been paid; and
  - (b) any other information relevant to the application (including any maps, diagrams, cross-sections, or reports).

Regulation 25(1)(b): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **26 Application for consent to flare or vent petroleum**

- (1) A permit holder may apply to the chief executive, in writing, for consent to flare or vent petroleum.
- (2) The application must include the following information:
  - (a) the extent to which the proposal complies with the requirements of regulations 35 and 36; and
  - (b) the location of the installation and facilities concerned, including their proximity to any gas-gathering system; and
  - (c) a statement that all reasonable and economical alternatives to flaring or venting have been examined and eliminated (with supporting data attached); and
  - (d) the effect of any flaring restriction on the net present value of a development option using a discount rate of 3%; and
  - (da) the effect of any flaring restriction on the net present value of a development option using a discount rate of 10%; and
  - (db) a statement of the value of the information to be derived from well-testing operations in terms of design of development plans that will maximise economic recovery; and
  - (e) if relevant, information about whether any well shut-in may—
    - (i) cause reservoir damage; or
    - (ii) hamper reservoir performance; or

- (iii) damage equipment.
- (3) In subclause (2)(e), **well shut-in** includes a well shut-in that is necessary to avoid wasting gas while any facilities in relation to the well are installed.
  - Regulation 26(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).
  - Regulation 26(2)(d): replaced, on 24 May 2013, by regulation 25 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).
  - Regulation 26(2)(da): inserted, on 24 May 2013, by regulation 25 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).
  - Regulation 26(2)(db): inserted, on 24 May 2013, by regulation 25 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## 27 Chief executive may grant consent to flare or vent petroleum with conditions

- (1) The chief executive may grant an application under regulation 26(1) with any conditions that he or she thinks fit.
- (2) Without limiting subclause (1), the chief executive may impose conditions in respect of 1 or more of the following matters:
  - (a) permissible flare size:
  - (b) ensuring the operation and maintenance of the facilities concerned are carried out in a manner that minimises flaring or venting:
  - (c) requiring the permit holder to prepare a report on options available to reduce or minimise flaring or venting (which must include options for the collection and use of the gas produced):
  - (d) implementing, to the satisfaction of the chief executive, reservoir management practices to conserve reservoir energy:
  - (e) establishing maximum annual total gas plant flaring or venting limits for production and process facilities:
  - (f) restricting the number of flaring or venting events in any 6-month period:
  - (g) keeping accurate records of all flaring or venting events, including the date, time, duration, and (as far as practicable) volume of petroleum flared or vented:
  - (h) making available to the chief executive, on his or her request,—
    - (i) the records kept under paragraph (g); or
    - (ii) daily production testing reports; or
    - (iii) the records kept under paragraph (g) and daily production testing reports:
  - (i) restricting the circumstances in which flaring or venting may be carried out.

Regulation 27 heading: amended, on 24 May 2013, by regulation 47(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 27(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 27(2): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 27(2)(d): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 27(2)(h): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **28 Application for appointment of arbitrator in relation to access arrangement**

An application to the chief executive for the appointment of an arbitrator under section 64(1) of the Act must include—

- (a) the reference number of the permit to which the access arrangement relates (if applicable); and
- (b) a map and description of the land over which the arbitrator is to determine the access arrangement (**access land**); and
- (c) the particulars (if known) of each owner and occupier of the access land; and
- (d) the particulars of the permit holder or applicant for the permit (or the permit holder's or permit applicant's representative) who is the contact person for the application; and
- (e) a detailed statement setting out—
  - (i) the reasons for the desired access arrangement; and
  - (ii) the proposed mining operations to be undertaken in relation to the access arrangement and the timing of them; and
  - (iii) the potential effects of the mining operations on the access land and its owner or any occupier of it.

Regulation 28: amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

### *Notices*

## **29 Notice of surrender of permit**

- (1) A notice to the chief executive under section 40(1) of the Act of the surrender of a permit or part of a permit must be in the form prescribed by the chief executive and signed by the permit holder.
- (2) The notice must be accompanied by—
  - (a) a statement of the reasons for the surrender; and

- (b) if the notice is in respect of only part of the permit, a map of the existing permit area showing the boundaries of the area of land within it that is to be surrendered.
- (3) For the purposes of subclause (2)(b), the boundaries of the area of land that is to be surrendered must be located and defined on the map by—
  - (a) lines of latitude or longitude, if practicable to do so; or
  - (b) straight line edges between turning points, in any other case.

Regulation 29(1): amended, on 24 May 2013, by regulation 26 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 29(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

### **30 Notice of access arrangement**

A notice to the Registrar-General of Land of an access arrangement for the purposes of section 83(1) of the Act must be—

- (a) in the form prescribed by the chief executive; and
- (b) signed by the permit holder or applicant for the permit concerned.

Regulation 30(a): amended, on 24 May 2013, by regulation 27 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

### **31 Notice of intention to carry out geochemical, gravity, magnetic, or seismic survey**

- (1) A permit holder must give the chief executive notice if the permit holder intends to carry out a geochemical, gravity, magnetic, or seismic survey in the permit area concerned.
- (2) The notice must—
  - (a) be given at least 15 working days before the survey commences or (if that is not possible) be given as soon as practicable before the survey commences together with the reasons for the non-compliance with the notice period; and
  - (b) state the reference number of the permit to which the notice relates; and
  - (c) set out the details of the survey; and
  - (d) include a map of the area to be surveyed.
- (3) At least 3 months before undertaking the proposed survey or (if that is not possible) as soon as practicable before the survey commences, the permit holder must provide to the chief executive the proposed or preferred name for the survey.
- (4) If the chief executive considers that a name provided under subclause (3) is the same as or substantially similar to an existing survey name, the chief executive may require the permit holder to provide a new name.

- (5) A permit holder must comply with a request under subclause (4) before the survey commences.

Regulation 31(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 31(2)(a): replaced, on 24 May 2013, by regulation 28(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 31(3): inserted, on 24 May 2013, by regulation 28(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 31(4): inserted, on 24 May 2013, by regulation 28(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 31(5): inserted, on 24 May 2013, by regulation 28(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

### **32 Notice of intention to carry out well-drilling operations**

- (1) A permit holder must give the chief executive notice if the permit holder intends to carry out well-drilling operations in the permit area concerned.

- (2) The notice must—

- (a) be given at least 15 working days before the well-drilling operations commence or (if that is not possible) be given as soon as practicable before the well-drilling operations commence together with the reasons for the non-compliance with the notice period; and
- (b) include details of the proposed drilling, including, for each well, the information described in Schedule 5.

- (3) At least 3 months before undertaking the proposed well-drilling operations or (if that is not possible) as soon as practicable before the well-drilling commences, the permit holder must provide to the chief executive the proposed or preferred name of the well.

- (4) If the chief executive considers that a name provided under subclause (3) is the same as or substantially similar to an existing well name, the chief executive may require the permit holder to provide a new name.

- (5) A permit holder must comply with a request under subclause (4) before the well-drilling operations commence.

Regulation 32(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 32(2)(a): replaced, on 24 May 2013, by regulation 29(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 32(3): inserted, on 24 May 2013, by regulation 29(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 32(4): inserted, on 24 May 2013, by regulation 29(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 32(5): inserted, on 24 May 2013, by regulation 29(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**33 Notice of completion of well producing, or associated with producing, petroleum**

- (1) A permit holder must give the chief executive notice that a well producing, or associated with producing, petroleum has been completed, as soon as practicable and not later than 20 working days after its completion.
- (2) The notice must—
  - (a) identify the well by name and number; and
  - (b) provide full details of the method of completion and the equipment used; and
  - (c) state whether the well is capable of production.

Regulation 33(1): amended, on 24 May 2013, by regulation 30 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 33(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**34 Notice of suspension of well-drilling operations**

- (1) A permit holder must give the chief executive notice that any well-drilling operations have been suspended, as soon as practicable and not later than 20 working days after the drilling is suspended.
- (2) The notice must—
  - (a) identify the well by name and number; and
  - (b) state why and how the drilling was suspended; and
  - (c) state the anticipated duration of the suspension; and
  - (d) state the status of the well; and
  - (e) provide full details of the well-drilling operations at the time the drilling was suspended.

Regulation 34(1): amended, on 24 May 2013, by regulation 31 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 34(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**34A Notice of discovery**

- (1) A permit holder must give the chief executive notice of the discovery of a hydrocarbon accumulation as soon as practicable and not later than 20 working days after the date of the discovery.
- (2) A notice of discovery must—
  - (a) identify the well concerned by name and number; and
  - (b) provide the depth of discovery and the interpreted formation the discovery was made in; and
  - (c) provide gross and net pay of the discovery in total vertical depth; and

- (d) identify the nature of the hydrocarbons discovered; and
  - (e) provide interpreted porosity, permeability, and water saturation for the discovery formation; and
  - (f) if interpreted, provide the column height for the discovery formation.
- (3) For the purposes of this regulation, significant moveable hydrocarbons exist for the purposes of a discovery if there is evidence of a sufficient quantity of petroleum to justify further appraisal activities.

Regulation 34A: inserted, on 24 May 2013, by regulation 32 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

### **34B Notices of well-stimulation operations**

- (1) A permit holder must give the chief executive notice of the commencement of well-stimulation operations (including hydraulic fracturing) at least 10 working days or (if that is not possible) as soon as practicable before the operations commence.
- (2) A notice of commencement of well-stimulation operations must—
- (a) identify the well concerned by name and number; and
  - (b) provide the name of the legal person (not an individual) that will be conducting the work; and
  - (c) state the purpose of the operations; and
  - (d) provide full details of the method of stimulation and the equipment to be used; and
  - (e) if the notice is provided less than 10 working days before the well-stimulation operations commence, be accompanied by the reasons for the non-compliance with the notice period.
- (3) A permit holder must give the chief executive notice of the conclusion of well-stimulation operations as soon as practicable and not later than 10 working days after the date on which the operations concluded.
- (4) A notice of conclusion of well-stimulation operations must—
- (a) identify the well concerned by name and number; and
  - (b) confirm who conducted the operations; and
  - (c) confirm the method of stimulation and equipment used in the operations; and
  - (d) include a statement of the outcome of the operations.
- (5) In this regulation, **well-stimulation operations** means any operation performed on a hydrocarbon reservoir in order to restore or enhance the reservoir's productive potential by improving the flow of hydrocarbons into the well bore.

Regulation 34B: inserted, on 24 May 2013, by regulation 32 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**34C Notices of well-workover operations**

- (1) A permit holder must give the chief executive notice of the commencement of well-workover operations at least 10 working days or (if that is not possible) as soon as practicable before the operations commence.
- (2) A notice of commencement of well-workover operations must—
  - (a) state the purpose of the workover operations; and
  - (b) identify the well concerned by name and number; and
  - (c) provide the name of the legal person (not an individual) that will be conducting the operations; and
  - (d) if the notice is provided less than 10 working days before the well-workover operations commence, be accompanied by the reasons for the non-compliance with the notice period.
- (3) A permit holder must give the chief executive notice of the conclusion of well-workover operations as soon as practicable and not later than 10 working days after the date on which the operations conclude.
- (4) A notice of conclusion of well-workover operations must—
  - (a) identify the well concerned by name and number; and
  - (b) include a statement of the outcome of the operations.
- (5) In this regulation, **well-workover operations** means 1 or more operations performed on a well in order to induce or increase production, but does not include well-stimulation operations (as defined in regulation 34B(5)).

Regulation 34C: inserted, on 24 May 2013, by regulation 32 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**34D Notices of well-testing operations**

- (1) A permit holder must give the chief executive notice of the commencement of well-testing operations at least 10 working days or (if that is not possible) as soon as practicable before the operations commence.
- (2) A notice of commencement of well-testing operations must—
  - (a) identify the well concerned by name and number; and
  - (b) provide the name of the legal person (not an individual) that will be conducting the operations; and
  - (c) state the purpose of the operations; and
  - (d) provide full details of the method of testing and the equipment to be used; and
  - (e) if the notice is provided less than 10 working days before the well-testing operations commence, be accompanied by the reasons for the non-compliance with the notice period.

- (3) A permit holder must give the chief executive notice of the conclusion of well-testing operations as soon as practicable but no later than 10 working days after the date on which the operations conclude.
- (4) A notice of conclusion of well-testing operations must—
  - (a) identify the well concerned by name and number; and
  - (b) include a statement of the outcome of the operations.
- (5) In this regulation, **well-testing operations** means any activity undertaken on an exploration or appraisal well in order to evaluate a well's production capability or reservoir characterisation, or both, in relation to a discovery.

Regulation 34D: inserted, on 24 May 2013, by regulation 32 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### **34E Notice of abandonment of well**

A permit holder must give the chief executive notice of the abandonment of a well before the abandonment operation commences.

Regulation 34E: inserted, on 24 May 2013, by regulation 32 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **Part 3 Mining operations**

### *Well-drilling operations*

#### **35 Well-drilling operations must be carried out in accordance with good industry practice**

All well-drilling operations carried out under a permit must be carried out in accordance with good industry practice.

Regulation 35 heading: amended, on 24 May 2013, pursuant to regulation 33 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 35: amended, on 24 May 2013, by regulation 33 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

### *Prevention of waste or loss of petroleum*

#### **36 Permit holder must avoid wasting petroleum resources**

A permit holder must avoid wasting petroleum resources by conducting mining operations in accordance with good industry practice.

Regulation 36: amended, on 24 May 2013, by regulation 34 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

### *Flaring and venting of petroleum*

#### **37 Permit holder may flare or vent petroleum only in certain circumstances**

A permit holder may flare or vent petroleum only if—

- (a) the flaring or venting is a consequence of carrying out an emergency shutdown; or
- (b) the flaring or venting—
  - (i) is in connection with initial well-testing operations; and
  - (ii) does not occur on more than 30 days during that time; or
- (c) the flaring or venting—
  - (i) occurs as a consequence of equipment failure; and
  - (ii) lasts no longer than 7 days from the date that the equipment failed; or
- (d) the flaring or venting is in accordance with a mining permit work programme approved by the Minister; or
- (e) the chief executive has granted an application under regulation 27.

Regulation 37(e): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## Part 4

### Reports, records, samples, and related matters

#### *Annual reports*

Heading: replaced, on 24 May 2013, by regulation 35 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### **38 Annual report on prospecting or exploration activities**

- (1) A permit holder must supply to the chief executive, not later than 31 March after the close of each calendar year, a report on any prospecting or exploration activities that have taken place under the permit during that year.
- (2) The report must—
  - (a) be in the form prescribed by the chief executive; and
  - (b) include a summary of as much of the information described in Part 1 of Schedule 6 as is applicable to the permit in that year; and
  - (c) provide the information required in relation to item 6 of Part 1 of Schedule 6 in accordance with the Petroleum Resources Management System.
- (3) The first report supplied under subclause (1) must relate to the calendar year ending 31 December 2013.

Regulation 38: replaced, on 24 May 2013, by regulation 35 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### **39 Annual report on mining activities and production operations**

- (1) A permit holder must supply to the chief executive, not later than 31 March after the close of each calendar year, a report on any mining activities and production operations that have taken place under the permit during that year.

- (2) The report must—
  - (a) be in the form prescribed by the chief executive; and
  - (b) subject to subclause (3), include the information described in Part 2 of Schedule 6.
- (3) The status report required in relation to item 18 of Part 2 of Schedule 6 must—
  - (a) be provided in accordance with the Petroleum Resources Management System; and
  - (b) be certified by the permit operator or, if the permit operator is a company, a director of the company.
- (4) In this regulation, **production operations** means the activities associated with a well, including those that are undertaken for the purposes of testing, appraising, monitoring, recovering, injecting petroleum or other fluids (including gases), or flaring or venting.
- (5) The first report supplied under subclause (1) must relate to the calendar year ending 31 December 2013.

Regulation 39: replaced, on 24 May 2013, by regulation 35 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### **40 Annual report on underground gas storage facilities**

- (1) A permit holder must supply to the chief executive, not later than 31 March after the close of each calendar year, a report on the operation of any underground gas storage facility that has taken place under the permit during that year.
- (2) The report must—
  - (a) be in the form prescribed by the chief executive; and
  - (b) include the information described in items 1 to 6, 8 to 10, 12 to 16, 19 to 21, and 23 of Part 2 of Schedule 6.
- (3) The first report supplied under subclause (1) must relate to the calendar year ending 31 December 2013.

Regulation 40: replaced, on 24 May 2013, by regulation 35 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### **41 Annual report on expenditure**

- (1) A permit holder must supply to the chief executive, not later than 31 March after the close of each calendar year, a report on the expenditure incurred under the permit concerned during that year.
- (2) The report must—
  - (a) be supplied in the form prescribed by the chief executive; and
  - (b) include the reference number of the permit concerned; and
  - (c) include the particulars of the permit holder; and

- (d) include the annual expenditure incurred for each of the matters described in Part 3 of Schedule 6.
- (3) The first report supplied under subclause (1) must relate to the calendar year ending 31 December 2013.

Regulation 41: replaced, on 24 May 2013, by regulation 35 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

*Reports and other documents on expiry, surrender, or revocation of permits*

Heading: inserted, on 24 May 2013, by regulation 35 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**42 Reports and other documents on expiry or surrender of permit**

- (1) Subclause (2) applies to a permit holder if—
  - (a) the permit concerned expires in accordance with section 35 of the Act; or
  - (b) the permit holder applies to surrender the permit under section 40(1) of the Act.
- (2) The permit holder must supply to the chief executive—
  - (a) all data, reports, and other documents on any activity under the permit that was begun, but not completed, before the permit expired or was surrendered and that the permit holder would have had to supply to the chief executive under these regulations had the activity been completed; and
  - (b) a copy of all reports, records, and maps that relate to plays, leads, or prospects identified by the permit holder during the holder's tenure of the permit.
- (3) The documents required by subclause (2) must be supplied not later than 40 working days after the permit expires or is surrendered.
- (4) To avoid doubt, this regulation does not apply to a permit holder if only a part of the permit is surrendered.

Regulation 42: replaced, on 24 May 2013, by regulation 35 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**43 Reports and other documents required on revocation of permit**

- (1) Subclause (2) applies to a permit holder if the permit concerned is revoked under section 39 of the Act.
- (2) The permit holder must supply to the chief executive—
  - (a) all data, reports, and other documents on any activity under the permit that was begun, but not completed, before the permit was revoked and that the permit holder would have had to supply to the chief executive under these regulations had the activity been completed before the permit was revoked; and

- (b) a copy of all reports, records, and maps that relate to plays, leads, or prospects identified by the permit holder during the holder's tenure of the permit.
- (3) The documents required by subclause (2) must be supplied not later than 40 working days after the permit is revoked.

Regulation 43: replaced, on 24 May 2013, by regulation 35 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**43A Reports and other documents required if permit area partially surrendered or relinquished**

- (1) Subclause (2) applies to a permit holder if the permit holder—
  - (a) applies to surrender part of the permit under section 40(1) of the Act or as otherwise required by the conditions of the permit; or
  - (b) relinquishes part of the permit area by operation of any of sections 35A to 35C of the Act.
- (2) The permit holder must supply to the chief executive a list of the documents required to be supplied to the chief executive under these regulations, and indicate the documents that relate to—
  - (a) the entire permit area;
  - (b) the permit area surrendered or relinquished;
  - (c) the permit area retained.
- (3) The permit holder must also supply to the chief executive a copy of all reports, records, and maps that relate to plays, leads, or prospects identified by the permit holder during the holder's tenure of the partially surrendered or relinquished permit area.
- (4) If the permit holder has acquired data that covers both the retained permit area and the partially surrendered or relinquished permit area, the permit holder must supply to the chief executive the information required under subclause (2) that relates only to the partially surrendered or relinquished permit area.
- (5) The reports and other documents required by this regulation must be supplied not later than 40 working days after the permit area is partially surrendered or relinquished.
- (6) For the purposes of this regulation, a permit is **relinquished** in relation to any land if—
  - (a) the land is excluded from the permit by the operation of any of sections 35A to 35C of the Act or the permit; or
  - (b) the relevant part of the permit is surrendered under section 40 of the Act or otherwise required by the conditions of the permit.

Regulation 43A: inserted, on 24 May 2013, by regulation 35 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

*Reports on surveys***44 Reports on surveys**

- (1) A permit holder who carries out a survey must supply to the chief executive, not later than 240 working days after the survey is completed, a report about the survey.
- (2) The report must include the following information:
  - (a) the type of survey, and the method and equipment used for it, including,—
    - (i) in relation to any marine or airborne survey, the navigation method used; and
    - (ii) in relation to any satellite survey, its orbit details; and
  - (b) the start and finish dates of the survey; and
  - (c) the location of the survey, including how the positions of the points of measurement or observation were determined (and their accuracy estimates); and
  - (d) any records of data collected, including—
    - (i) the time, location, and spatial reference of each measurement or observation; and
    - (ii) the original data collected; and
    - (iii) any processed data (including a description of the processing method); and
    - (iv) if the processed data is corrected, the corrected data (including a description of the correcting method); and
  - (e) a bibliography of any material referenced in the report.
- (3) For the following types of surveys, the following information must also be included in the report to which the survey relates:
  - (a) for a geological survey, the information described in Part 1 of Schedule 7:
  - (b) for a gravity survey, the information described in Part 2 of Schedule 7:
  - (c) for a magnetic survey, so much of the information described in Part 3 of Schedule 7 as is applicable to the survey:
  - (d) for a geochemical survey, the information described in Part 4 of Schedule 7:
  - (e) for a seismic survey, so much of the information described in Part 5 of Schedule 7 as is applicable to the survey:
  - (f) for a review of existing petroleum data, the information described in Part 6 of Schedule 7.

- (4) For the avoidance of doubt, the requirements of this regulation are in addition to any other requirements that the permit holder may have under these regulations in relation to the survey or any document relating to the survey.

Regulation 44(1): amended, on 24 May 2013, by regulation 36 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 44(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

*Reports on well-drilling operations and related activities*

**45 Daily well-drilling report**

- (1) A permit holder must supply to the chief executive a daily report on well-drilling operations as soon as practicable after the expiry of the 24-hour period to which the report relates.
- (2) A daily well-drilling report must include the information described in Part 1 of Schedule 8.

Regulation 45(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**45A Daily well-workover report**

- (1) A permit holder must supply to the chief executive a daily report on well-workover operations as soon as practicable after the expiry of the 24-hour period to which the report relates.
- (2) A daily well-workover report must include as much of the information described in Part 1 of Schedule 8 as is practicable to include.

Regulation 45A: inserted, on 24 May 2013, by regulation 37 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**45B Daily well-testing report**

- (1) A permit holder must supply to the chief executive a daily report on well-testing operations as soon as practicable after the expiry of the 24-hour period to which the report relates.
- (2) A daily well-testing report must include as much of the information described in Part 1 of Schedule 8 as is practicable to include.

Regulation 45B: inserted, on 24 May 2013, by regulation 37 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**46 Well completion report and well-stimulation and testing activities report**

- (1) A permit holder must supply to the chief executive a well completion report not later than 240 working days after drilling of the well concerned ceases.
- (2) A well completion report must—
- (a) include as much of the information described in Part 2 of Schedule 8 as the permit holder has obtained or produced in relation to the well; and

- (b) include, as appendices, as much of the information described in Part 3 of Schedule 8 as the permit holder has obtained or produced in relation to the well; and
  - (c) be accompanied by as much of the information described in Part 4 of Schedule 8 as the permit holder has obtained or produced in relation to the well.
- (3) Despite subclauses (1) and (2), if the well is part of an integrated coal seam gas well-drilling programme, any interpretative information required under subclause (2) may be—
- (a) provided for the drilling programme as a whole; and
  - (b) supplied to the chief executive not later than 240 working days after the drilling programme is completed.
- (4) A permit holder must also supply to the chief executive a well-stimulation and testing activities report not later than 240 working days after the activities cease.
- (5) A well-stimulation and testing activities report must include—
- (a) the systems used; and
  - (b) the aims and outcomes of the testing and stimulation carried out; and
  - (c) any fluids and substances used and the amounts of each; and
  - (d) all reports previously submitted under these regulations for this activity; and
  - (e) the results and conclusions from these activities.

Regulation 46 heading: amended, on 24 May 2013, by regulation 38(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 46(1): amended, on 24 May 2013, by regulation 38(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 46(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 46(3)(b): amended, on 24 May 2013, by regulation 38(3) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 46(3)(b): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 46(4): inserted, on 24 May 2013, by regulation 38(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 46(5): inserted, on 24 May 2013, by regulation 38(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### **47 Well abandonment report**

- (1) A permit holder must supply to the chief executive a well abandonment report not later than 40 working days after the well concerned is abandoned.
- (2) A well abandonment report must—
- (a) identify the well by name and number; and

- (b) state the date when the well was abandoned; and
- (c) give a summary of the reasons for the abandonment; and
- (d) state—
  - (i) the positions of any cement plugs or bridge plugs; and
  - (ii) details of any casing, tubing, or surface down-hole equipment re-covered; and
  - (iii) details of any items left in the well.

Regulation 47(1): amended, on 24 May 2013, by regulation 39 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 47(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### **48 Core analysis report**

- (1) A permit holder must supply to the chief executive a list of any core analyses not later than 240 working days after the analyses are carried out.
- (2) A list must include,—
  - (a) for each sample, its porosity, permeability, and fluid saturation; and
  - (b) details of core plugs and the intervals over which the analyses were carried out.

Regulation 48(1): amended, on 24 May 2013, by regulation 40 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 48(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### *Samples to be supplied to chief executive*

Heading: amended, on 24 May 2013, by regulation 47(3) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### **49 Drill cuttings**

- (1) A permit holder must supply to the chief executive, not later than 120 working days after the well concerned reaches its total depth,—
  - (a) 2 sets of unwashed and air-dried drill cuttings from the well; and
  - (b) 1 set of washed and dried drill cuttings from the well.
- (2) All cuttings must be—
  - (a) contained in bags, approximately three-quarters full, labelled with—
    - (i) the name and number of the well from which the cuttings were taken; and
    - (ii) the drilling interval from which the cuttings were collected; and
  - (b) further contained in labelled, durable boxes with the cuttings laid out—
    - (i) consecutively in depth order; and

- (ii) in single layers.
- (3) For any interval in which no cuttings are collected, the permit holder must include an empty bag (of the same type and labelled in the same way as required for a bag containing cuttings).
- (4) The permit holder must not use cuttings prepared for the chief executive under this regulation for the permit holder's own analytical purposes.
- (5) This regulation does not apply to a permit holder if—
  - (a) the well concerned is being drilled as part of coal seam gas drilling operations; and
  - (b) obtaining drill cuttings is not a purpose of drilling the well.
- (6) For the purposes of subclause (2)(a), **bag** means,—
  - (a) in relation to unwashed and air-dried cuttings, a synthetic durable bag (with durable stitching) weighing at least 500 grams; and
  - (b) in relation to washed and dried drill cuttings, a durable bag weighing at least 100 grams.

Regulation 49(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 49(4): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 49(6)(a): amended, on 24 May 2013, by regulation 41(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 49(6)(b): amended, on 24 May 2013, by regulation 41(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **50 Core samples (other than sidewall core samples)**

- (1) A permit holder must supply to the chief executive samples of any core collected during well-drilling operations, not later than 120 working days after its collection.
- (2) The samples must be—
  - (a) supplied in the following manner:
    - (i) either whole or slabbed longitudinally with a thickness of not less than one-half of the diameter of the core; and
    - (ii) labelled in accordance with standard industry convention; and
    - (iii) contained in a suitable durable and strong container (in the same order as the core was cut) that is labelled with the name and number of the well from which the core was cut; and
  - (b) accompanied by a record of the percentage of core recovered from each core interval (including a statement of any intervals in which no core was recovered).
- (3) The permit holder must ensure that the core samples prepared for the chief executive under this regulation—

- (a) are stored in a manner that, as far as possible, prevents their contamination, deterioration, or loss; and
  - (b) are not used for the permit holder's own analytical purposes.
- (4) This regulation does not apply to any core collected from sidewall well-drilling operations
- Regulation 50(1): amended, on 24 May 2013, by regulation 42 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).
- Regulation 50(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).
- Regulation 50(3): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **51 Sidewall core samples**

- (1) A permit holder must supply to the chief executive samples of any sidewall core collected during well-drilling operations, not later than 120 working days after their collection.
- (2) The samples must be supplied in a durable and strong container that is labelled with—
- (a) the name and number of the well from which the core was collected; and
  - (b) the depth from which the core was taken; and
  - (c) the sidewall core suite number.
- (3) The permit holder must ensure that the sidewall core samples prepared for the chief executive under this regulation—
- (a) are stored in a manner that, as far as possible, prevents their contamination, deterioration, or loss; and
  - (b) are not used for the permit holder's own analytical purposes.
- Regulation 51(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).
- Regulation 51(3): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **51A Application of regulations 50 and 51 to coal seam gas operations**

Despite regulations 50 and 51, a permit holder for a coal seam gas drilling operation must supply the core samples and sidewall core samples required under those regulations only in the following circumstances:

- (a) the well concerned is being drilled as part of the coal seam gas drilling operation; and
- (b) the well encounters a reservoir formation interval; and
- (c) the well is—
  - (i) the first well drilled as part of the drilling programme for the operation that has encountered a reservoir formation interval; or

- (ii) the well is more than 2 km from the first well drilled as part of the drilling programme that has encountered a reservoir formation interval.

Regulation 51A: inserted, on 24 May 2013, by regulation 43 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## 52 Microfossil and petrographic material

- (1) A permit holder must supply to the chief executive—
  - (a) microscope slides, picked residues, and a representative sample of any microfossils collected from any micropalaeontological, palynological, or other survey; and
  - (b) petrographic thin sections from any petrographic analysis carried out under a survey or in relation to a survey.
- (2) Slides, residues, samples, and thin sections must be—
  - (a) supplied to the chief executive not later than 120 working days after the survey is completed; and
  - (b) suitably packaged and labelled.

Regulation 52(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 52(2)(a): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## 53 Oil samples

- (1) A permit holder must supply to the chief executive representative samples of oil retrieved from formation testing of a well, not later than 40 working days after the oil is retrieved.
- (1A) If condensate is retrieved from formation testing of a well and condensate samples can be packaged at surface temperature and pressure, the permit holder must supply to the chief executive representative samples of the condensate not later than 40 working days after the condensate is retrieved.
- (2) The samples must be packaged—
  - (a) at surface temperature and pressure; and
  - (b) in 1-litre sealed glass containers that are suitably labelled.

Regulation 53(1): amended, on 24 May 2013, by regulation 44(1) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 53(1): amended, on 24 May 2013, by regulation 47(4) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Regulation 53(1A): inserted, on 24 May 2013, by regulation 44(2) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## 53A Reports relating to royalties

A permit holder must comply with the reporting requirements of the Crown Minerals (Royalties for Petroleum) Regulations 2013 (which include reporting

requirements for the calculation and payment of royalties in relation to a permit).

Regulation 53A: inserted, on 24 May 2013, by regulation 45 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **Part 5**

### **Miscellaneous**

Part 5: replaced, on 24 May 2013, by regulation 46 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### **54 Publication of information supplied to chief executive**

- (1) The chief executive may, but is not obliged to, publish all or any of the information described in item 6 of Part 1 of Schedule 6 and items 1, 17, and 18 (other than 18(e)), 21, and 23 of Part 2 of Schedule 6.
- (2) Information published under this regulation may be—
  - (a) information provided to the chief executive under these regulations; or
  - (b) information generated or compiled by the chief executive from information provided to him or her under these regulations.

Regulation 54: replaced, on 24 May 2013, by regulation 46 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

#### **55 Transitional provision**

No permit holder is required to comply with the obligation to provide a half-year report for the period 1 January to 30 May 2013 imposed by the principal regulations before the commencement of the Crown Minerals (Petroleum) Amendment Regulations 2013.

Regulation 55: replaced, on 24 May 2013, by regulation 46 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **Part 6**

### **Miscellaneous**

*[Revoked]*

Part 6: revoked, on 24 May 2013, by regulation 46 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## **Schedule 1**

### **Forms**

*[Revoked]*

rr 15, 17(1), 18(1), 19(1), 24(1)(a), (3)(a),  
29(1), 30(a)

Schedule 1: revoked, on 24 May 2013, by regulation 48 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## Schedule 2

### Information to accompany permit applications

rr 17, 19, 20, 23

Schedule 2: replaced, on 24 May 2013, by regulation 49 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

### Part 1

#### Information to accompany prospecting permit application under regulation 17

- 1 A statement of the technical qualifications and financial resources of the applicant.
- 2 If the application is on behalf of 2 or more persons,—
  - (a) an explanation of each person's interest in the permit; and
  - (b) a statement identifying which of the persons is to be the permit operator.
- 3 A map of the permit area.
- 4 A summary of the geology of the permit area.
- 5 The results of any previous prospecting and exploration work in relation to the permit area.
- 6 The play or plays to be addressed in the permit and a description of the critical risks associated with them that demonstrates the applicant's understanding of the petroleum system.
- 7 A statement of the proposed minimum work programme that—
  - (a) states its objectives and estimated cost; and
  - (b) identifies the technical rationale, milestones, and deliverables of the programme.

### Part 2

#### Information to accompany mining permit application under regulation 19

- 1 A statement of the technical qualifications and financial resources of the applicant.
- 2 A map of the permit area.
- 3 If the application is on behalf of 2 or more persons,—

- (a) an explanation of each person's interest in the permit; and
  - (b) a statement identifying which of the persons is to be the permit operator.
- 4 A report that—
- (a) sets out the reserves and proposed work programme for the development of the field concerned; and
  - (b) includes the information described in Schedule 3.

### **Part 3**

## **Report to accompany extension of area application under regulation 20**

### **Subpart 1—Information to be included if application made following discovery**

- 1 A map showing the boundaries of the area of land for which the extension is sought in relation to the existing permit area. The boundaries of the area of land for which the extension is sought must be located and defined on the map by—
- (a) lines of latitude or longitude, if practicable to do so; or
  - (b) straight line edges between turning points, in any other case.
- 2 A statement of the reasons why in the permit holder's opinion (by reference to the relevant information described in Schedule 4), the Minister should extend the area to which the permit relates, including a discussion of any proposed amendments to the current work programme for the permit.

### **Subpart 2—Information to be included if application made to extend area of land for exploration permit and no discovery made**

- 3 A map showing the boundaries of the area of land for which the extension is sought in relation to the existing permit area. The boundaries of the area of land for which the extension is sought must be located and defined on the map by—
- (a) lines of latitude or longitude, if practicable to do so; or
  - (b) straight line edges between turning points, in any other case.
- 4 A statement of the reasons why, in the permit holder's opinion, the Minister should extend the area to which the permit relates, including a discussion of any proposed amendments to the current work programme for the permit.
- 5 A summary of the geology of the area for which the extension is sought.

- 6 The results of any previous prospecting and exploration work in relation to the area for which the extension is sought.
- 7 A description of the prospect or prospects that are the target of future drilling operations.
- 8 The time frame in which those drilling operations is to commence.

#### **Part 4**

### **Information to accompany application for extension of mining permit**

- 1 A statement of the duration of the extension sought.
- 2 A statement of the reasons why, in the permit holder's opinion, the Minister should extend the duration of the permit, including information on the following matters:
  - (i) the work programme to be carried out during the proposed extension period and its objectives; and
  - (ii) the results of activities undertaken by the permit holder in the permit area to date; and
  - (iii) the geology and petroleum potential of the permit area; and
  - (iv) details of any modifications to the existing work programme, production schedule, or proposed level of expenditure required to deplete the field.
- 3 An explanation as to why the discovery to which the permit relates cannot be economically depleted before the current permit expires.

### Schedule 3

#### Information to be included in report to accompany application for mining permit (unless permit allocated by public tender)

item 4 of Part 2 of Schedule 2

- 1 An executive summary of the information supplied under clauses 2 to 10, including—
  - (a) a summary of the in-place and recoverable reserves (including the applicant's calculations of the assigned probabilities of the reserves); and
  - (b) a description of the proposed facilities to extract, treat, and transport the petroleum; and
  - (c) the proposed annual and cumulative field production.
- 2 A discussion of the permit history, including—
  - (a) exploration results (including any geophysical or geochemical survey results); and
  - (b) appraisal results (including any drilling and well-testing results).
- 3 A statement of the geology of the permit area, including its regional setting, geological history, and regional stratigraphy.
- 4 A geophysical analysis and interpretation of the permit area, including—
  - (a) a database and maps showing seismic coverage and discussion of seismic data quality; and
  - (b) the seismic ties to wells and a discussion of the accuracy of the ties; and
  - (c) the seismic interpretation techniques and results; and
  - (d) the techniques and results of depth conversion (including velocity analysis and a discussion of the sensitivity of depth mapping to variations in velocity fields); and
  - (e) maps of all average and interval velocity fields used in depth conversion, including uncertainty maps; and
  - (f) structural maps and models in time and depth for reservoir units; and
  - (g) a geophysical analysis of seismic attributes and modelling, including seismic inversion; and
  - (h) a discussion of reservoir structure and uncertainties that could affect reserves (including analysis of faulting, alternative fault correlations, and fault seals).
- 5 A geological interpretation covering the following:

- (a) description of stratigraphy, including a table of formation tops, thicknesses, and cored intervals (all in measure depth and true vertical depth); and
  - (b) sedimentological analysis and facies interpretation; and
  - (c) stratigraphic and structural correlations of reservoir units; and
  - (d) net sand and net pay maps for each reservoir; and
  - (e) a geological model, including description of the petroleum system and its constituent parts on which the mining proposal is based.
- 6 A petrophysical evaluation, including—
- (a) a database containing wireline, logging while drilling, monitoring while drilling, core, and sidewall core measurements, and any other subsurface measurements; and
  - (b) formation temperature measurements; and
  - (c) a petrophysical interpretation that covers—
    - (i) lithology, porosity, permeability; and
    - (ii) connate water saturation and water salinity; and
    - (iii) the cut-off criteria used to determine net reservoir and net pay; and
    - (iv) fracture density; and
    - (v) comparisons of laboratory analyses and log-derived data; and
  - (d) any petrographic and core analyses of reservoir rocks.
- 7 Reservoir engineering data, including—
- (a) results and interpretation of all subsurface pressure measurements, including wireline, logging while drilling, monitoring while drilling, and test data measurements (open and cased hole); and
  - (b) the interpreted position of gas–oil, oil–water, gas–water contacts, including an electric log analysis over the reservoir interval; and
  - (c) desorption data and gas content maps for any coal seam gas field; and
  - (d) a description of aquifer extent and strength; and
  - (e) details of reservoir fluid parameters, including—
    - (i) pressure, volume, and temperature analysis of gas (methane and ethane), liquefied petroleum gas (propane and butane), condensate (C5+), and oil (including dew point and bubble point); and
    - (ii) the oil formation by volume factor and the gas to oil and condensate to gas ratios with depth; and
    - (iii) chemical analysis of any gas, condensate, or water samples; and

- (iv) a discussion of any significant differences between the results from different wells or intervals within a well.
- 8 Reserves information, including—
- (a) structure maps, cross sections, or models showing the areal and vertical extent of the field and the hydrocarbon contacts; and
  - (b) a statement of the hydrocarbons-in-place, including (with any estimates made in accordance with the Petroleum Resources Management System)—
    - (i) a description of the methodologies used to calculate their volume and distribution; and
    - (ii) the assigned probabilities for oil, gas (methane and ethane), liquefied petroleum gas (propane and butane), and condensate (C5+) (with details for each production layer or zone); and
    - (iii) oil initially in place; and
    - (iv) gas initially in place; and
  - (c) recoverable hydrocarbon estimates, including their assigned probabilities, and production forecasts for individual wells and field totals (irrespective of any gas sales contracts); and
  - (d) a reservoir model or models; and
  - (e) information in relation to any contingent resources; and
  - (f) an explanation of why any contingent resources are classified as such, including a description of development and cost thresholds).
- 9 A proposed field development plan, including—
- (a) a summary structure map for each reservoir showing interpreted field contacts and the surface and down-hole location of proposed production and injection wells; and
  - (b) an estimate and range of field life, including annual forecast production profiles for oil, water, and gas (and the assumptions on which the profiles are based) and any forecast annual injection profiles; and
  - (c) information on all existing and proposed well locations (and their surface and reservoir completion depths), pipelines, production and reinjection facilities, treatment facilities, and transportation and storage facilities, including—
    - (i) a development timeline showing the sequence of drilling, well completions, installation of facilities, and commissioning and production start-up dates; and
    - (ii) a discussion of well design and well completion philosophy supported by diagrams; and

- (iii) the proposed geological, petrophysical, and reservoir monitoring programmes for the duration of the field's life (with particular emphasis on resolving field uncertainties and dynamic performance); and
- (iv) the proposed pressure maintenance, including any assisted recovery, artificial lift, or enhanced recovery; and
- (v) the proposed frequency of reserve re-evaluations; and
- (vi) the proposed location of meters to be used for the metering of oil, condensate, and gas that is produced, consumed, and flared; and
- (vii) details of petroleum to be used to fuel any of the proposed operations or to be flared, and a discussion of other methods considered for petroleum utilisation; and
- (viii) a description of the proposed development (including diagrams) and a description of the related process facility (including flow diagrams); and
- (ix) the reasons for selecting the proposed development; and
- (x) a discussion of the proposed abandonment of facilities; and
- (xi) proposed expenditure on matters to which this paragraph applies; and
- (xii) the proposed commencement date for production.

10 The proposed point or points of valuation for royalties payable.

Schedule 3: amended, on 24 May 2013, by regulation 50 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**Schedule 4**  
**Information to be included in report to accompany application to  
change exploration permit**

item 2 of Part 3 of Schedule 2

- 1AA A statement of the duration of the extension sought.
- 1AB A map of the existing permit area showing the boundaries of the area of land within it to which the extension of duration relates. The boundaries of the area of land to which the extension relates must be located and defined on the map by—
- (a) lines of latitude or longitude, if practicable to do so; or
  - (b) straight line edges between turning points, in any other case.
- 1AC A statement setting out the proposed work programme for the appraisal, including its objectives.
- 1 Maps, diagrams, and cross sections identifying the interpreted limits of the petroleum discovery or discoveries to be appraised.
- 2 The field exploration and appraisal history.
- 3 A geophysical analysis and interpretation of the area proposed to be appraised that—
- (a) includes seismic maps and profiles; and
  - (b) discusses seismic coverage, synthetic seismogram production, seismic interpretation, and modelling; and
  - (c) states techniques and calculations used for depth conversion.
- 4 A sedimentological and stratigraphic analysis and interpretation of the area proposed to be appraised that includes—
- (a) its regional setting and tectonic history; and
  - (b) a facies analysis of the reservoir unit; and
  - (c) a depositional model; and
  - (d) a petrographic description of reservoir rocks; and
  - (e) a description of the geological correlation and stratigraphy of the reservoir.
- 5 Structural analysis and interpretation of the area proposed to be appraised that includes—
- (a) the derivation of the top reservoir map; and

- (b) a discussion of the reservoir structure, including analysis of faulting and its possible effect on reservoir continuity, fracturing, and any other structure-related aspects of the reservoir.
- 6 A geological model of the field.
- 7 Relevant well test analyses.
- 8 Details of formation parameters, including—
- (a) the petrophysical interpretation with discussion of lithology, porosity, permeability, and connate water saturation; and
  - (b) the cut-off criteria used to define net to gross and fluid interfaces; and
  - (c) comparisons of laboratory analyses and log-derived data; and
  - (d) detailed information on all wireline tests; and
  - (e) interpretation and discussion of the results of the matters in paragraphs (a) to (d); and
  - (f) detailed information on reservoir zoning; and
  - (g) data on formation temperature; and
  - (h) methods used to correct deviated hole data to true vertical depth; and
  - (i) maps for each reservoir zone showing isoporosity, the net to gross ratio, water saturation, and permeability; and
  - (j) results and interpretation of all forms of production logging and allied techniques in cased holes, and all repeat formation testing information (including all wireline formation testing and sampling); and
  - (k) the interpreted position of oil–water, gas–oil, and gas–water contacts and their derivation; and
  - (l) a description of the extent and strength of any aquifers.
- 9 Details of reservoir fluid parameters, including—
- (a) analyses of pressure, volume, and temperature for gas (methane and ethane), liquefied petroleum gas (propane and butane), condensate (C5+), and oil (including any variations of dew point and bubble point pressures with depth); and
  - (b) the oil formation by volume factor; and
  - (c) the gas to oil ratio with depth (including a discussion of any significant difference between results from different wells or intervals); and
  - (d) chemical analyses of gas, condensate, oil, and water column fluids that include a discussion of any significant difference between results from different wells or intervals.

- 10 Details of petroleum volumes, including (with any estimates made in accordance with the Petroleum Resources Management System),—
- (a) for petroleum in place,—
    - (i) expected volumetric and material balance estimates of oil, gas (methane and ethane), liquefied petroleum gas (propane and butane), and condensate (C5+) with details for each production layer or zone; and
    - (ii) field totals and either the cumulative distribution or range of estimates of oil, gas (methane and ethane), liquefied petroleum gas (propane and butane), and condensate (C5+) for each production layer or zone; and
    - (iii) a discussion of the basis for the estimates under subparagraphs (i) and (ii) and the uncertainties in the calculations; and
  - (b) for petroleum recovery,—
    - (i) estimates of expected reserves for each production layer or zone; and
    - (ii) field totals and either the cumulative distribution or range of estimates of expected reserves for each production layer or zone; and
    - (iii) a discussion of the basis for the estimates under subparagraphs (i) and (ii) and the uncertainties in the calculations.

Schedule 4: amended, on 24 May 2013, by regulation 51 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**Schedule 5**  
**Information to be included in notice of intention to carry out well-**  
**drilling operations**

r 32(2)(b)

- 1 The name, number, and location of the proposed well.
- 2 The reference number of the permit under which it is to be drilled.
- 3 The co-ordinates of the well site and, if a deviated well, the co-ordinates of the bottom hole location at total depth.
- 4 The elevation of the well site to the kelly bushing, rotary table, or derrick floor, and,—
  - (a) if onshore, above ground level; or
  - (b) if offshore, the water depth at the well site.
- 5 The proposed depth of the well.
- 6 The proposed spudding-in and completion dates for the well.
- 7 The purpose and geological objectives in drilling the well.
- 8 A table, with descriptions, of the forecasted stratigraphy for each formation, including its—
  - (a) age; and
  - (b) lithology; and
  - (c) thickness and depth to the top of the formation (measured in both metres along hole below the kelly bushing and true vertical sub-sea).
- 9 A description of the forecasted well stratigraphy.
- 10 Two-way time or depth contour maps of each target horizon.
- 11 A representative interpreted seismic line with an overlay of the projected well path.
- 12 Details of any proposed directional drilling, including the proposed—
  - (a) kick-off depth; and
  - (b) angle build-up; and
  - (c) average and maximum deviation.
- 13 A schematic diagram of the proposed casing programme.
- 14 The drilling forecast with a schematic diagram.

- 15 Details of the proposed sampling programme, including—
- (a) details of the proposed intervals for drill cuttings and cores; and
  - (b) the proposed types and intervals of electric logs and surveys; and
  - (c) the proposed intervals and methods of formation and reservoir testing.

**Schedule 6**  
**Information to be included in annual reports**

rr 38(2)(b), 39(2)(b), 40(2)(b)

**Part 1**  
**Information to be included in annual report under regulation 38 on  
prospecting or exploration activities**

- 1 All field investigations undertaken, including—
  - (a) their location, nature, and purpose; and
  - (b) the quality of the data obtained; and
  - (c) any other relevant information.
- 2 Any surveys undertaken in relation to the permit.
- 3 Any seismic surveys carried out in relation to the permit, including,—
  - (a) if a two-dimensional survey, the total line kilometres acquired; or
  - (b) if a three-dimensional survey, the total area surveyed and the grid size.
- 4 Any reprocessed geophysical data obtained, including the total line kilometres reprocessed.
- 5 Petroleum initially in place and gas initially in place estimates from—
  - (a) a discovery; or
  - (b) ongoing appraisal of a discovery.
- 6 Recoverable hydrocarbon resource or reserve estimates (stating the range of uncertainties) from—
  - (a) a discovery; or
  - (b) ongoing appraisal of a discovery.
- 7 Any drilling activities, including, for each well,—
  - (a) its name, number, and location; and
  - (b) its spud, total depth, and rig release dates; and
  - (c) the metreage drilled for exploration appraisal; and
  - (d) the metreage, or additional metreage, of any development wells, including re-entry and sidetrack wells; and
  - (e) the kick-off depth for any sidetrack wells.
- 8 Any well-stimulation activities and well-workover activities, their purpose, and any testing done.

- 9 The iwi engagement report required under section 33C of the Act.
- 10 All cumulative, annual, and monthly oil, condensate (C5+), gas (methane and ethane), liquefied petroleum gas (propane and butane), and water production figures (by field) from any appraisal activities.

## **Part 2**

### **Information to be included in annual report under regulation 39**

- 1 For each well, reservoir, and field,—
  - (a) the calculated daily and monthly production rates for oil, condensate (C5+), liquefied petroleum gas (propane and butane), gas (methane and ethane), and water; and
  - (b) the measured daily and monthly production rates for oil, condensate (C5+), liquefied petroleum gas (propane and butane), gas (methane and ethane), and water; and
  - (c) the cumulative and yearly oil, condensate (C5+), liquefied petroleum gas (propane and butane), gas (methane and ethane), and water production figures, and the corresponding calorific values for the oil, condensate (C5+), liquefied petroleum gas (propane and butane), and gas (methane and ethane).
- 2 For each well, reservoir, and field, the number of days or part days that they were in production.
- 3 For each well, reservoir, and field, the calculated daily and monthly gas and water injection rates.
- 4 For each well, the number of days or part-days on which gas and water injection occurred.
- 5 For each well and reservoir, the watercut, and the gas to oil, and condensate to gas ratios.
- 6 For each well, if measured, the flowing tube head and flowing down-hole pressures.
- 7 The fuel gas or oil used and gas or oil flared in extracting petroleum.
- 8 If measured at any location, its oil, condensate, and gas gravity (using the American Petroleum Institute scale).
- 9 For each well, if measured, the static tube head and static down-hole pressures.
- 10 For each well, the completion and perforation intervals and details of any changes to those intervals during the half-year.

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- 11 For each well, any suspension or downtime and the reasons for it.
- 12 Any workovers and their purpose.
- 13 A summary of—
- (a) the production, development, and exploration activities undertaken in the field or as studies; and
  - (b) the results of those activities, including—
    - (i) any significant revised views on the geology and geophysics (including any in relation to geological or seismic interpretations or models, structure, and stratigraphy); and
    - (ii) any petrophysical interpretation carried out; and
    - (iii) reservoir fluid parameters; and
    - (iv) reservoir performance, reservoir model, production, and injection profiles; and
    - (v) any seismic surveys carried out in relation to the permit, including,—
      - (A) if a two-dimensional survey, the total line kilometres acquired; or
      - (B) if a three-dimensional survey, the total area surveyed and the grid size; and
    - (vi) any reprocessed geophysical data obtained, including details of the total line kilometres processed.
- 14 A status report on any facilities under design or construction or that have been commissioned.
- 15 Details of any drilling activities.
- 16 Details of any surveys undertaken during the report period.
- 17 An outline of proposed mining operations to be undertaken in the next year, including—
- (a) the proposed production profile for the projected life of the field (in tabular and graphic form); and
  - (b) an indicative maximum deliverability profile using the installed infrastructure; and
  - (c) the proposed production and reservoir management programme.
- 18 A status report for the purposes of regulation 39 that includes—
- (a) a report on petroleum initially in place, which includes estimates of oil initially in place and natural gas initially in place; and

- (b) a report of P90, P50, and P10, or proven, and proven plus probable, and proven plus probable plus possible estimates (1P, 2P, and 3P estimates) for remaining and ultimately recoverable oil, condensate (C5+), liquefied petroleum gas (propane plus butane) and gas (methane and ethane)(including an explanation of the methodology used to calculate the estimates); and
  - (c) a report on C50 estimates (2C estimates) for contingent resources; and
  - (d) a full explanation of why contingent resources are classified as contingent (including a description of development and cost thresholds); and
  - (e) a copy of any report or any field study undertaken that results in a revised estimate of recoverable or in-place petroleum; and
  - (f) the permit holder's estimates of oil initially in place and gas initially in place.
- 19 An explanation of the methodology for calculating any of the data referred to in clauses 1 to 18 if—
- (a) an explanation of the methodology has not been supplied in previous reports under regulation 39; or
  - (b) the methodology has not previously been used in relation to the permit.
- 20 Supplementary figures and diagrams, if appropriate.
- 21 The daily oil, condensate, gas, and water production figures, per well, from any appraisal activities.
- 22 The iwi engagement report required under section 33C of the Act.
- 23 A report of minimum, average, and maximum daily and hourly system deliverability for gas using the installed infrastructure.
- 24 The cumulative gas and water injection volumes since reservoir and well injection commenced.

### **Part 3**

#### **Information to be included in annual report under regulation 40 on expenditure incurred under permit**

- 1 Exploration drilling, including any re-entries and side-tracks.
- 2 Appraisal drilling, including any re-entries and side-tracks.
- 3 Development drilling, including any re-entries and side-tracks.
- 4 Seismic reprocessing.

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- 5 Seismic acquisition.
  - 6 Geological and geophysical technical analyses.
  - 7 Permit administration.
  - 8 Environmental regulation.
  - 9 If the report relates to a mining permit,—
    - (a) production operating expenditure; and
    - (b) capital expenditure.

Schedule 6: amended, on 24 May 2013, by regulation 52 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**Schedule 7**  
**Information to be included in reports on surveys**

r 44(3)

**Part 1**  
**Information to be included in geological survey report under  
regulation 44(3)(a)**

- 1 An interpretation of the stratigraphy and structure of the area surveyed and its regional correlation.
- 2 Geological maps, sections, and columns prepared as a result of the survey.
- 3 Any other information relevant to the survey.

**Part 2**  
**Information to be included in gravity survey report under regulation  
44(3)(b)**

- 1 For each observation point, its position, elevation, and gravity value relative to a recognised datum.
- 2 For each gravity station,—
  - (a) a description of it; and
  - (b) a location map; and
  - (c) its elevation or barometric pressure; and
  - (d) the time, temperature, and adopted gravity value for it.
- 3 The density determination of rocks measured (or their derived values).
- 4 The gravity meter closure chart and gravity meter drift (if calculated) showing misclosures or adjustments.
- 5 Any gravity anomaly maps or profiles prepared as part of the survey.
- 6 Any special processed sections, plots, or similar material resulting from the survey.
- 7 Any observation logs and files resulting from the survey.
- 8 Any data acquisition, data processing, quality control or supervision, consultant, navigation, or survey reports produced, and any documents relating to them.

- 9 An interpretation report that includes maps, profiles, and discussion of any gravity anomalies.

### **Part 3**

#### **Information required to be included in magnetic survey report under regulation 44(3)(c)**

- 1 The position, elevation, and value of the magnetic field intensity relative to a stated datum and the type of magnetometer used.
- 2 For marine surveys, the water depth and position of the magnetometer sensor relative to the vessel.
- 3 For magnetic vector measurements, the values of observed components or directions.
- 4 The magnetometer drift curves, calibration details, and loop closure charts showing misclosures or adjustments.
- 5 For each magnetic station,—
  - (a) a description of it; and
  - (b) a location map showing its position, elevation, and adopted magnetic values.
- 6 The magnetic properties of all rock samples measured.
- 7 The magnetic anomaly maps and profiles prepared as part of the survey.
- 8 Any special processed sections, plots, or similar material resulting from the survey.
- 9 Any observation logs and files resulting from the survey.
- 10 Any data acquisition, data processing, quality control or supervision, consultant, navigation, or survey reports produced, and any documents relating to them.
- 11 An interpretation report that includes magnetic anomaly maps, depth maps, and profiles of the area surveyed.

**Part 4**  
**Information required to be included in geochemical survey report  
under regulation 44(3)(d)**

- 1 All assay and sample location numbers.
- 2 Sample location details, including co-ordinates for each.
- 3 Details of the sampling procedures used, including—
  - (a) the type of material sampled; and
  - (b) the size of the samples; and
  - (c) the depth of the samples.
- 4 Observation logs and files, if any.
- 5 Details of the analytical procedures used, including—
  - (a) the name of the laboratory that analysed the samples; and
  - (b) the extraction or digestion techniques used; and
  - (c) the analytical methods for identifying the limits of detection and precision.
- 6 Reference background values in the area surveyed.
- 7 A report interpreting the information in clause 6.
- 8 Any anomaly or location maps or profiles prepared as part of the survey.
- 9 Any special processed sections, plots, or similar material resulting from the survey.
- 10 Details of any quality control or quality assurance studies resulting from the survey.

**Part 5**  
**Information to be included in seismic survey report under regulation  
44(3)(e)**

- 1 Type and characteristics of receivers.
- 2 Type and characteristics of the seismic energy source and the characteristics of the signal generated by it.
- 3 For any offshore seismic survey, digital navigation data in a form acceptable to the chief executive that indicates—

- (a) the co-ordinates of the shot-point and receiver locations; and
  - (b) the depth of operation of the seismic energy source.
- 4 For any offshore seismic survey, the cetacean observer reports.
- 5 For any onshore seismic survey, digital data in a form acceptable to the chief executive that indicates—
- (a) the co-ordinates of the shot-point and receiver locations; and
  - (b) the elevation of shot-points, receivers, and statics; and
  - (c) the depth below surface of the seismic energy source.
- 6 If a shot-hole is used,—
- (a) the depth to groundwater (if known); and
  - (b) the lithological notes of the driller concerned.
- 7 The types and characteristics of—
- (a) the shot-point and receiver configurations, including depth below surface; and
  - (b) the recording system and field processing techniques.
- 8 The depth to the base of weathering, if known, where up-holes or down-holes are drilled for statics corrections.
- 9 A seismic processing report that includes a digital copy of the final stacking velocities in a form acceptable to the chief executive.
- 10 Recording data from the survey, including—
- (a) observation logs; and
  - (b) details of recording instrumentation; and
  - (c) the cable and spread configuration; and
  - (d) the field tape data; and
  - (e) timing; and
  - (f) the energy source.
- 11 Any data acquisition, data processing, quality control or supervision, consultant, navigation, or survey reports produced, and any documents relating to them.
- 12 For any two-dimensional seismic survey,—
- (a) the shot-point base map; and
  - (b) all stacked, migrated, filtered, or further processed seismic sections; and
  - (c) all seismic sections, which must include—

- (i) annotation to allow identification of the records and the processing applied; and
  - (ii) a reflection time scale of 10 cm/s (or other appropriate scale); and
  - (iii) annotation of water depths for offshore seismic reflection data; and
  - (iv) a description of processing methods; and
  - (v) shot-point maps showing the location of recorded profiles; and
  - (d) an interpretation report that includes—
    - (i) relevant enclosures and maps; and
    - (ii) two-way time, depth, isopach, isochron, isochore, and bathymetric contour maps prepared as part of the interpretation; and
    - (iii) the results of any specialised processing of the seismic data for velocity studies (for example, studies of amplitude variation with offset, inversion, spectral analysis, neural network analysis, trace classification, spectral decomposition, coherence, attribute analysis, or signal envelope analysis); and
    - (iv) depth conversion information, including—
      - (A) average and interval velocity maps; and
      - (B) details regarding any software-based depth conversion procedures; and
  - (e) any special processed sections or similar material resulting from the survey.
- 13 For any three-dimensional survey,—
- (a) a processed shot-point and receiver database; and
  - (b) the shot-point base map; and
  - (c) the unfiltered migrated data set; and
  - (d) the unscaled filtered migrated data set; and
  - (e) a digital copy of the stacking velocities; and
  - (f) a common depth point bin base map; and
  - (g) specifications and definition of the bin grid; and
  - (h) the trace binning criteria; and
  - (i) the survey corner points; and
  - (j) the in-line and cross-line vertical time sections extracted from the three-dimensional volume (every 20th line or as appropriate) that are—
    - (i) annotated to allow identification of the records and the processing applied; and
    - (ii) at a time scale of 10 cm/s or other appropriate scale; and

- (iii) annotated for water depths (if offshore seismic data); and
  - (k) interpretation reports accompanied by relevant enclosures and maps.
- 14 For any seismic data that has been further processed or reprocessed, the information referred to in clauses 1 to 13 that relates to the further processing or re-processing.

### **Part 6**

#### **Information to be included in review of existing petroleum data report under regulation 44(3)(f)**

- 1 A bibliography of the data on which the review is based.
- 2 An interpretation of the data reviewed and the conclusions reached.
- 3 Any maps, geological sections or columns, or any other data relevant to the review.

Schedule 7: amended, on 24 May 2013, by regulation 47(5) of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

## Schedule 8 Well-drilling reports

rr 45(2), 45A(2), 45B(2), 46(2)

### Part 1 Information to be included in daily reports under regulations 45, 45A, and 45B

- 1 The well name, number, and location.
- 2 The report number and date.
- 3 The current depth and the distance drilled.
- 4 The direction and inclination of any deviation in the well.
- 5 The current diameter of the hole.
- 6 Details of the current operation.
- 7 A formation evaluation log that clearly sets out—
  - (a) the rock types penetrated or encountered during drilling (as determined from drill cuttings, cores, and sidewall samples); and
  - (b) the proportions of each rock type; and
  - (c) lithological descriptions of the rock types penetrated or encountered; and
  - (d) the penetration rates, and particulars of any oil or gas encountered, including oil fluorescence and oil staining; and
  - (e) a summary of chromatography readings and gas readings in the mud, including—
    - (i) background and maximum levels; and
    - (ii) any trip gas, connection gas, or survey gas encountered.
- 8 A geological interpretation of the well site.
- 9 Measurements or estimates of porosity recorded at the well site.
- 10 Details of the cored intervals and types of core recovered (conventional, wire-line, sidewall, or any other) and the percentage recovery of each.
- 11 Details of drill-stem or formation tests (open hole or cased), the interval tested, the recovery, and any relevant engineering details.
- 12 Details of any casing operation, including setting depth and diameter.
- 13 Details of any cementing operations, including the setting depth or plugs.

- 14 Details of any casing pressure, formation integrity, leak-off, or cement integrity tests.
- 15 Details of any electric and geophysical logging, deviation and temperature surveys, and any other tests or surveys carried out.
- 16 A record of any other operations (for example, fishing, perforating, acidising, or fracturing).
- 17 Fluid data, including details of the fluid type, changes in fluid type, and circulation losses or gains.

## **Part 2**

### **Information to be included in well completion report under regulation 46(2)(a)**

- 1 A summary of the drilling operations, including—
  - (a) the reasons for locating and drilling the well; and
  - (b) the well-drilling operations carried out; and
  - (c) the conclusions drawn from the operations.
- 2 General data, including—
  - (a) the name of the permit holder and any other participants in the drilling operations; and
  - (b) the reference number of the exploration or mining permit; and
  - (c) the well name, number, and its location co-ordinates (and, for a deviated well, the co-ordinates of the bottom hole location at total depth); and
  - (d) the elevation of the kelly bushing, rotary table, or derrick floor; and
  - (e) the following dates:
    - (i) the drilling commencement; and
    - (ii) the spudding-in of the well; and
    - (iii) the reaching of total depth of the well; and
    - (iv) the releasing of the rig; and
  - (f) the total well depth reached; and
  - (g) the status of the well; and
  - (h) details of the well completion, including down-hole equipment with schematic drawings.
- 3 A drilling data summary that includes—
  - (a) hole sizes and depths; and

- (b) details of any directional drilling, including kick-off depth, angle build-up, average and maximum deviations, and severity and depth of any dog-legs; and
  - (c) details of casing and liners, including size, weight, grade, thread and coupling, number of joints, and setting depths; and
  - (d) details of casing cementing, including brief details of the quantities and grades of cement used, the methods used (single-staged or multi-staged), and the cement top (estimated or logged); and
  - (e) the drilling fluid used, including fluid type, and brief details of treatment, weight, relevant fluid properties, and the quantities of any additives used; and
  - (f) details of—
    - (i) the completion fluid analysis; and
    - (ii) drilling fluid losses; and
    - (iii) the water supply for drilling fluids; and
  - (g) the perforation record, including casing size and intervals, the type of charge, hole density, the size of holes, and method used; and
  - (h) details of plugging back and cement squeeze operations, and methods used; and
  - (i) details of fishing operations, including the depth and nature of the operation and any equipment left in the hole; and
  - (j) details of any side-tracked hole, including the method used and the reason for side-tracking; and
  - (k) the drilling time analysis; and
  - (l) details of leak-off tests and formation integrity tests; and
  - (m) schematic drawings illustrating the matters described in paragraphs (a) to (d).
- 4 Details of geological sampling, including—
- (a) details of the method and intervals of collecting drill cutting samples, the intervals if no samples were collected, and where drill cutting samples are stored; and
  - (b) details of any coring operation, including whether conventional or wire-line, the core number, the interval cored, the percentage recovery of the interval cored, and where the core is stored; and
  - (c) details of any sidewall sampling, including the intervals sampled, the method used, the recovery rate, and where the samples are stored.
- 5 Digital copies and details of electric and geophysical logs and mechanical surveys and their interpretation.

- 6 Details of any formation testing, including—
  - (a) the data recorded for the intervals tested, the methods of testing, and the equipment details; and
  - (b) the results, including recoveries, pressures, and temperatures; and
  - (c) interpretation methods.
- 7 Details of any fluid or gas samples collected, including the method of sampling, the intervals sampled, and the analyses of the samples.
- 8 Details of any reservoir data collected, including the methods used and the pressure, temperature, and flow-meter surveys.
- 9 Geological information, including—
  - (a) a summary of the regional geology; and
  - (b) a stratigraphic table showing the interpreted age, thickness, lithology, and the depth to the top for each formation; and
  - (c) a description of the well stratigraphy; and
  - (d) a structural interpretation; and
  - (e) a description of any formation penetrated; and
  - (f) a correlation of the section drilled, and a comparison of the result with neighbouring wells (supported by crosssections, if appropriate); and
  - (g) details of the porosity and permeability of the sediments penetrated with reference to the log interpretation; and
  - (h) any re-evaluation of geological concepts as a result of the drilling.
- 10 A bibliography.

### Part 3

#### **Information to be included as appendices to well completion report under regulation 46(2)(b)**

- 1 Any petrological, palaeontological, or analytical reports.
- 2 Analyses and descriptions of cores.
- 3 Copies of daily drilling reports for the entire operation.
- 4 Reports and interpretations in respect of operations on the well.
- 5 Reports prepared from studies carried out on samples during well operations.
- 6 Velocity seismic profiling reports.

- 7 Checkshot or velocity survey reports.
- 8 Data acquired during drilling and testing operations, including mudlogs, electric and geophysical logs, well tests, and gas and oil indications.

**Part 4**  
**Information to accompany well completion report under regulation  
46(2)(c)**

- 1 Location and geological maps.
- 2 Formation evaluation, electric, geophysical, and composite logs, and any other well surveys.
- 3 A well-drilling history chart showing the main drilling operations—
  - (a) by days; and
  - (b) by depths.
- 4 A well-drilling deviation survey chart and the deviation survey measurement data.
- 5 Photographs of core with each photograph labelled to show its location and depth.

Schedule 8: amended, on 24 May 2013, by regulation 53 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

**Schedule 9**  
**Royalty returns**

*[Revoked]*

rr 54(2)(b), 55(1)(b)(i), 56(2)(b)(i), 58(1)

Schedule 9: revoked, on 24 May 2013, by regulation 54 of the Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127).

Diane Morcom,  
Clerk of the Executive Council.

## Reprints notes

### **1** *General*

This is a reprint of the Crown Minerals (Petroleum) Regulations 2007 that incorporates all the amendments to those regulations as at the date of the last amendment to them.

### **2** *Legal status*

Reprints are presumed to correctly state, as at the date of the reprint, the law enacted by the principal enactment and by any amendments to that enactment. Section 18 of the Legislation Act 2012 provides that this reprint, published in electronic form, has the status of an official version under section 17 of that Act. A printed version of the reprint produced directly from this official electronic version also has official status.

### **3** *Editorial and format changes*

Editorial and format changes to reprints are made using the powers under sections 24 to 26 of the Legislation Act 2012. See also <http://www.pco.parliament.govt.nz/editorial-conventions/>.

### **4** *Amendments incorporated in this reprint*

Contract and Commercial Law Act 2017 (2017 No 5): section 347

Crown Minerals (Petroleum) Amendment Regulations 2013 (SR 2013/127)

Crown Minerals (Petroleum) Amendment Regulations 2009 (SR 2009/126)