### PROVINCE OF BRITISH COLUMBIA

Ministerial Order No.

M 221

# REGULATION OF THE MINISTER OF ENERGY AND MINES

# Geothermal Resources Act

I, Richard Neufeld, Minister of Energy and Mines, order that the Geothermal Drilling and Production Regulation, B.C. Reg. 170/83, is amended as set out in the Appendix.

JUN 0 8 2004

BC REG 248 2004

Authority under which	(This part is for administrative purposes only and is not part of the Order.) h Order is made:
Act and section:-	Geothermal Resources Act, R.S.B.C. 1996, c. 171, section 23
Other (specify):-	10000000
May 25	, 2004 653/200

### APPENDIX

- Section 4 (1) (a) of B.C. Reg. 170/83, the Geothermal Drilling and Production Regulation, is repealed.
- 2 Section 5 is amended:
  - (a) by repealing subsection (1) (a),
  - (b) by repealing subsection (2),
  - (c) in subsection (3), by deleting "Two copies" and substituting "One copy", and
  - (d) by repealing subsection (6) and substituting the following:
    - (6) Information obtained from a test hole by the ministry in the course of the administration of the Act may be made available by the ministry to the government of Canada or an agency of the government of Canada if that government or agency gives adequate assurance that the information will be kept in confidence within that government or agency.
- 3 Section 6 (c) and (d) are repealed.
- 4 Section 7 is amended by deleting the words following "division head".
- 5 Section 9 is amended
  - (a) by repealing subsection (1),
  - (b) in subsection (2), by repealing paragraph (b) and deleting all the words following paragraph (c) (ii), and
  - (c) by repealing subsections (3) and (4).
- 6 Section 12 is amended by deleting "and legal description".
- 7 The following section is added:

## Exemption order of the division head

- 12.1 The division head may exempt, by order, an operator from a requirement under section 13, 15 or 17 (4) in relation to a well on conditions specified in the order.
- 8 Section 13 is repealed and the following substituted:

#### Samples and cores

- 13 An operator must
  - (a) while drilling a well, take a series of samples, at depth intervals of 10 m, of the various formations which drilling penetrates, and
  - (b) prepare and deliver to the division, within 30 days of the release of the drilling rig, descriptions of these samples and of any cores taken in the well.

#### 9 Section 14 is amended

- (a) by repealing subsection (2), and
- (b) by repealing subsection (4) and substituting the following:
  - (4) An operator must submit a copy of each log to the division not more than 30 days after the date the log was taken.

### 10 Section 15 is repealed and the following substituted:

#### Deviation and directional surveys in wells

- 15 An operator must make
  - (a) deviation surveys during well drilling at 150 m depth intervals, or
  - (b) a directional survey on completion of drilling operations.

### 11 Section 17 is amended

- (a) by repealing subsection (2) and substituting the following:
  - (2) An operator must set surface casing cement under pressure and must not drill out surface casing cement until sufficient compressive strength has been reached to obtain a valid formation integrity test in accordance with good operating practice.,
- (b) by repealing subsection (4) and substituting the following:
  - (4) An operator must
    - (a) cement intermediate and production casing through all porous zones, including not less than 150 m above the casing shoe,
    - (b) test this cementing in accordance with good operating practice, and
    - (c) not drill out this cementing until sufficient compressive strength has been reached in accordance with good operating practice., and
- (c) by repealing subsection (6).

### 12 Section 18 (3) is repealed and the following substituted:

(3) An operator must maintain blow out prevention equipment in good working order if a well is being drilled and must regularly test this equipment in accordance with good operating practice so that all flows from the well are safely controlled and the environment is protected.

- 13 Sections 19 and 20 are repealed.
- 14 Section 21 is amended
  - (a) in subsection (2), by deleting all the words following "Training Service" in paragraph (c) and by repealing paragraphs (d) and (e), and
  - (b) by repealing subsection (3).
- 15 Section 24 is repealed.
- 16 Section 25 is repealed and the following substituted:

### Sub-surface equipment

- An operator must keep at all times prior to abandonment of the well a detailed record of all sub-surface equipment in the well and must make the record available to an officer of the division on request.
- 17 Sections 28 and 29 are repealed and the following substituted:

### Daily drilling reports

- 28 (1) An operator must keep a daily report at the site of a well being drilled or otherwise worked on.
  - (2) An operator must submit a copy of each daily report to the division at the completion of operations.
  - (3) An operator must include in a daily report complete data on all operations performed at the well on the day for which the report is prepared.
- 18 Section 30 is amended by deleting "well history" and substituting "wellsite geology".
- 19 Section 31 (2) is repealed.
- 20 Section 32 is amended
  - (a) by repealing subsection (4),
  - (b) in subsection (5), by deleting "an exploratory well" and substituting "a well",
  - (c) in subsection (6), by repealing paragraph (b), and
  - (d) by repealing subsection (8) and substituting the following:

(8) Geological and well reports and well data may be made available by the ministry to the government of Canada or an agency of the government of Canada if that government or agency gives adequate assurance that the information will be kept in confidence within that government or agency.

# 21 Sections 33 to 36 are repealed.

# 22 Section 37 is repealed and the following substituted:

# Plugging requirements of wells and test holes

- 37 (1) An operator must not leave a well or test hole unplugged or uncased after it is no longer used for the purpose for which it was drilled or converted.
  - (2) The division head may order one or more of the following persons to abandon, plug or restore a well or test hole:
    - (a) a owner or operator of the well or test hole;
    - (b) a trustee in bankruptcy, receiver or receiver-manager of the owner or operator or other person, not the owner or operator of the well or test hole, who, in the opinion of the division head, has a financial interest in the well or test hole equivalent to that of an owner or operator.

### 23 Section 38 (1) is amended

- (a) by repealing subsection (1) and substituting the following:
  - (1) As soon as weather permits on completion of a well or final abandonment of a well, test hole or production facility, the operator must return the surface to a condition that duplicates as closely as is reasonable the surface condition at the time operations were commenced, and
- (b) in subsection (3) by deleting "subsection (1) (c) and (d)." and substituting "subsection (1).".

# 24 Section 39 is repealed and the following substituted:

# Disposal of drilling and production material

- 39 (1) An operator must ensure that
  - (a) a fluid produced from or used in a well or test hole does not create a hazard to public health or safety or to the environment, and
  - (b) gaseous substances or odors produced from a well, test hole or production facility do not create a hazard to public health or safety.
  - (2) An operator must dispose of fluid or gaseous substances produced from a well, test hole or production facility by a method that safeguards public health or safety and the environment.

25 Section 44 is amended by deleting "5 (4), 9 (3) or (4), 13 (6), (10) or 11, 31 (2)" and substituting "5 (4)".