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Short title

1. These regulations may be cited as the *Well Drilling Regulations, 2003*.

Definitions

2. In these regulations

(a) "abandoned well" means a well that is not being used or maintained for future use as a well;

(b) "Act" means the *Water Resources Act*;

(c) "air vent" means an outlet at the upper end of the well casing that allows for equalization of air pressure between the inside of the well casing and the atmosphere, and for the release of gases from the well;

(d) "bedrock" means the solid rock underlying unconsolidated material such as sand, gravel and clay;

(e) "casing" means pipe or tubing installed in a well to support the sides of the well;

(f) "date of completion" means the date on which the well construction equipment is removed from the site of the well;

(g) "flowing well" means a well that has a static level above the surface of the ground; and

(h) "static water level" means the level attained by water in or from a well when no water is being taken from the well.

Application and licence

3. An application for a licence under the Act shall be in the form required by the minister.

Conditions

4. (1) A licence to carry on the business of drilling water wells shall be issued

(a) where the applicant is not a corporation, if he or she has successfully completed specialized training in well drilling from an institution approved by the minister and has completed not less than one year apprentice training under the supervision of a licensed well driller; or

(b) where the applicant has participated in the drilling of not less than 50 wells during the 2 years immediately preceding his or her applying for the licence and successfully passes a written examination which the department responsible for the Act shall give and administer; and

(c) where the applicant is a corporation, that corporation has in its full time employ a person with the training or experience indicated in paragraph (a) or (b).

(2) An applicant for a licence shall use equipment for drilling groundwater wells that is designed for that purpose and which complies with well drilling industry standards.

Application for a licence

5. (1) A person shall apply to the minister for a licence in the required form and shall provide the required fees.

(2) The minister may also require of an applicant other information that he or she considers necessary.

(3) Subject to section 82 of the Act, a well driller who has complied with the provisions of the Act and these regulations may obtain a renewal of his or her licence by applying to the minister no later than 15 days before the expiry of his or her licence in the manner described in subsection (1).

Marking of machinery

6. The owner of a machine used for well drilling shall mark that machine with his or her name, address and licence number in letters not less than 10 centimetres high.

Prohibition

7. A person shall not transfer to another person a licence held under the Act and these regulations.

Surface water

8. (1) A well driller shall not construct a well in a manner or location that would allow surface water to enter the well.

(2) Where a well is located in a place where surface water will pass over or near the opening of the well, the well driller shall fill the area immediately surrounding the well with clay or clean earth for a distance of at least 5 metres in all directions from the well opening and shall grade it to an elevation of at least 60 centimetres above the highest known surface water level.

(3) A well driller shall locate a well so that it is accessible for cleaning, treatment, repair, testing and inspection.

(4) The owner of a well is responsible in the same manner as the well driller for compliance with the provisions of subsections (1), (2) and (3).

Contamination

9. (1) A well driller shall locate a well a sufficient distance away from sources of pollution to prevent contamination of the well by groundwater flow or seepage.

(2) Except where permeability tests taken indicate or, if taken as required would indicate, that a greater distance should be maintained, a well driller shall not construct a well within the distances specified below from the sources of pollution named below:

Source of Pollution	Distance
Cesspool (receiving raw sewage)	30 m
Seepage (leaching) pit, filter bed, soil absorption field, earth pit privy, or similar disposal unit	16 m
Septic tank, concrete vault privy, sewer of tightly jointed tile or equivalent material, or sewer connected foundation drain	16 m
Sewer of cast iron with leaded or approved mechanical joints, independent clean water drain, or cistern	3 m
Pumphouse floor drain, cast iron with leaded joints, draining to ground surface	1 m

Distance from cesspool

10. (1) A well driller shall not locate a well within 60 metres of a cesspool or seepage pit that is more than 4 metres deep unless the well is cased in a manner adequate to prevent seepage from the cesspool or seepage pit into the well.

(2) Where a cesspool or seepage pit is constructed within 60 metres of an existing well, the well driller shall case the well as required under section 13 and shall reconstruct the well to standards approved by the minister or, if the reconstruction is not possible, the well shall be abandoned in accordance with section 18.

(3) A person shall not construct a source of pollution nearer to a well than the distances prescribed by subsection 9(2) unless the well is abandoned.

Sanitary landfill garbage dump

11. Where there is a sanitary landfill, garbage dump or other massive source of contamination so near to the site of a proposed well that it might contaminate the well, the well driller shall not commence construction or construct the well until he or she has obtained written approval for that construction from the minister.

Access to well under or adjacent to building

12. (1) A well driller shall not locate a well under a building unless provision is made in the construction of the building to allow access to the well for cleaning, treatment, repair, testing and inspection of the well.

(2) A well driller who locates a well adjacent to a building shall locate it so that the centre line of the well extended vertically will clear a projection from the building by not less than 2 metres.

Pipe standard

13. (1) A well driller shall install casing of standard pipe size and weight according to the specifications of the Canadian Society of Testing Materials (CSTM), or the American Society of Testing Materials (ASTM)

(a) of new material; and

(b) of sufficient length to prevent contamination of water in the well.

(2) Where, notwithstanding compliance with paragraphs (1)(a) and (b), contamination of water exists in the well, the well driller shall

(a) firmly seat the casing in bedrock at a depth specified by the minister;

(b) surround the casing with a cement grout not less than 5 centimetres in thickness; or

(c) carry out remedial action that may be decided by the minister.

(3) Immediately upon completion of the well, the well driller shall thoroughly clean all foreign substances from the well and shall disinfect the well using a method approved by the minister.

(4) When the drilling and disinfection of a well is completed, the well driller shall seal the upper open end of the casing with a commercially manufactured well seal or by capping of a type approved by the minister in a manner sufficient to prevent contamination of the well until a pump is installed.

(5) The well driller shall take all reasonable precautions to prevent a well from flowing out of control, particularly in areas of the province that in the opinion of the minister have a history of flowing wells.

(6) The well driller shall, before commencing the drilling of a well, investigate whether the area of the province, in which he or she proposes to drill, has a history of flowing wells.

Flowing well

14. The owner of a flowing well shall ensure that the well is at all times fitted with a capping device or equipped with some other device of a type approved by the minister that prevents or minimizes the flow of water to waste.

Pump

15. (1) When a pump is installed in a well, other than a well in which a packer type pump is installed or in which the casing is used as the suction pipe, the person who installs the pump shall install an air vent that has an inside diameter of not less than 6 millimetres and that extends at least 30 centimetres above the land surface at the opening of the well with the open end shielded and screened to prevent the entry into the air vent of a substance that might impair the quality of the water in the well.

(2) When a pump is installed in a well, the person who installs the pump shall

- (a) seal the top of the well casing with a well cap commercially manufactured for the purpose and of a type approved by the minister; and
- (b) disinfect the pump before installation by a method approved by the minister.

Connection below surface

16. When a connection to the casing of a well is made below the surface of the ground, the person who makes the connection shall make the connection watertight by means of a well seal commercially manufactured for the purpose of a type approved by the minister.

Water control area

17. (1) The minister may designate an area of the province as a water control area by publishing a notice in the *Gazette* and advertising in one newspaper of general circulation in the area.

(2) Where, in the course of drilling a well in a water control area, salty, sulphurous or other water that might impair the quality of potable groundwater is encountered, the well driller shall seal off that water by a method approved by the minister.

Maintenance of well and abandoned well

18. (1) The owner of a well shall maintain the well at all times after its completion date in a manner sufficient to prevent the entry of surface water and other foreign materials into the well.

(2) The owner of a well not in use shall cap the well with a device commercially manufactured and of a type approved by the minister sufficient to prevent the entry of a substance that might impair the quality of water in the well.

(3) Where a well is dry or abandoned and its continued existence might result in the impairment of groundwater, the owner shall fill and seal the well in a manner sufficient to prevent the vertical movement of water in it by a method approved by the minister.

Prohibition re waste disposal

19. A person shall not use a well for waste disposal without the written approval of the minister.

Water yield

20. A well driller shall not complete the construction of a well without performing an adequate test to determine the yield of water from the well.

Domestic test

21. (1) Where a well is intended to supply water for domestic purposes to a single family dwelling unit, an adequate test for the purpose of section 20 shall be either a bail test of not less than one hour duration or a pump test of not less than one hour duration or an air lift test of not less than one hour duration.

(2) A test made under subsection (1) shall be performed in a manner approved by the minister.

Non-domestic test

22. (1) Subject to subsection (3), where a well is intended to supply water for a purpose other than that set out in section 21, an adequate test for the purpose of section 20 shall be a pump test of 6 to 72 hour duration depending upon the size of the proposed water supply system.

(2) The test made under subsection (1) shall include recovery measurements.

(3) The test and measurements made under this section shall be conducted in a manner approved by the minister.

(4) The results of any test or measurements made under this section shall be reported to the minister in the form required by the minister within 30 days of the completion of the test.

Repeal

23. The *Well Drilling Regulations, Consolidated Newfoundland and Labrador Regulation 974/96*, are repealed.