#### WATER STEWARDSHIP INFORMATION SERIES



# B.C.'s Ground Water Protection Regulation



### **What Private Well Owners Should Know**

#### What is the Ground Water Protection Regulation?

On November 1, 2005, a new regulation that affects all private well owners in B.C. came into force to improve the safety and quality of British Columbia's ground water resources.

The Ground Water Protection Regulation establishes standards to protect ground water supplies by requiring all water wells in British Columbia to be properly constructed, maintained, and, at the end of their service, properly deactivated and ultimately closed.

### Why is it important to follow the regulation?

By following the regulation, well owners can protect their own water supply and that of their neighbours, and help to keep ground water resources healthy and clean for future generations.

#### What are the changes?

#### New standards for water supply wells

All water supply wells constructed after November 1, 2005 are legally required to meet the minimum construction standards in the Ground Water Protection Regulation. This means that new drilled and dug water supply wells must have a:

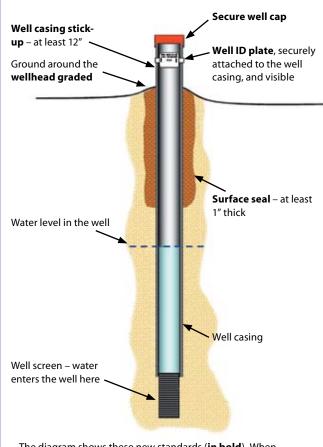
**Surface Seal** – to prevent contaminants from the surface or a shallow subsurface zone from entering the well. Seal must be at least 2.5 cm. (1-inch) thick.

Secure Well Cap – to prevent direct and unintended entry into the well of any water or undesirable substances at the surface of the ground, including floodwater, ponded water, and contaminants.

**Well Casing Stick-up** – to help floodproof the well. Stick-up must be at least 30 cm. (12 inches) above ground surface or the floor of pump house to the top of the casing. **Wellhead Graded** – to drain surface water away from the wellhead.

Well Identification (ID) Plate – well drillers are responsible for attaching a well identification plate to a new water supply well.

**Controlled or Stopped Artesian Flow** – to prevent wasting water, the driller must construct the well in a manner that stops or controls any artesian flow.



The diagram shows these new standards (**in bold**). When construction of a well is completed, the well owner should receive and retain the written report on the work from the well driller.

## Qualified contractors must drill the well and install the well pump.

- All water wells must be constructed by or under the direct supervision of qualified well drillers (QWD) except for dug wells less than 15 meters (50 feet) deep. A registry of qualified well drillers can be found at: http://www.env.gov.bc.ca/wat/gws/applications/ pdfs/well\_drillers\_reg.pdf.
- Pumps for water wells must be installed by or under the direct supervision of qualified well pump installers (QWPI). A registry of qualified well pump installers

can be found at: http://www.env.gov.bc.ca/wat/ gws/applications/pdfs/pump\_install\_reg.pdf.

Registered well drillers and pump installers have identification cards issued by the Ministry of Environment.

What are my responsibilities under the regulation?

A private well owner must do as follows.

#### Deactivate or close a well no longer in use.

- Wells that have not been used for five years must be deactivated. Deactivating a well means capping, securing, protecting, and maintaining the well in a safe and sanitary condition while it is out of service.
- Deactivated wells not used for 10 years must be properly closed. Closure involves backfilling and sealing the well. Drilled wells more than 5 meters (15 feet) or dug wells more than 15 meters (50 feet) deep must be closed by a QWD.

#### Cap the well.

Ensure a secure and vermin-proof cap is installed by October 31, 2007 if the well, regardless of when it was constructed, does not have a cap.

#### Maintain the well identification plate.

- Ensure the well identification plate is maintained and protected from damage, and the number on the plate is clearly visible.
- If the plate is damaged or lost, a new one must be obtained and attached to the well as soon as possible. Well identification plates can be obtained free of charge by contacting a regional Ministry of Environment office (see listing at back).

#### Protect the well.

- It is illegal to put any junk in an active or abandoned well, e.g., pesticides or fertilizers, carcasses, human or animal waste, refuse, or materials from construction or demolition.
- Do not disturb the wellhead or the surface seal.
- Operate the well in a manner that prevents the intrusion of salt water or contaminated water into the well, or into the aquifer from which the water is withdrawn (e.g., don't over-pump).
- Protect the stick-up from physical damage.

## What can I do without hiring a contractor?

- A private well owner can do the following.
- Disinfect the pump and well.
- Ensure the pump house is in good repair and kept free of chemicals and other contaminants such as pesticides, fertilizers, and gasoline.
- Attach or replace a damaged or lost well identification plate.
- Cap the well, if a commercially available cap is used.
- Take water quality samples to ensure the well water is potable.

#### **Questions?**

Ministry of Environment officials are responsible for administering the regulation and may order certain types of work to be done on private wells under particular circumstances. Any questions about the Ground Water Protection Regulation should be directed to the nearest Ministry of Environment office (see listing below).

The *Water Act* and Ground Water Protection Regulation can be found at: http://www.env.gov.bc.ca/wsd/plan\_ protect\_sustain/groundwater/index.html#leg.

### For information, contact the nearest ministry office:

Vancouver Island Region
Nanaimo 🛈 (250) 751-3100
Lower Mainland Region
Surrey © (604) 582-5200
Thompson and Cariboo Regions
Kamloops (250) 371-6200

#### **Kootenay and Okanagan Regions**

Nelson	. 🕐 (250) 354-6333
Penticton	. 🕐 (250) 490-8200

#### Omineca Peace and Skeena Regions

Prince George ..... (250) 565-6135



Ground water and surface water are interdependent.