## Thursday 1 July - Why do a bacteriological water analysis twice a year and check for nitrates every two years?

It should be noted that every well owner is responsible for controlling the quality of his drinking water. The bacteriological quality of the water should be subjected to strict testing, as it can have a direct impact on health, as we saw in the case of the Walkerton disaster, and drinking water with significant concentrations of nitrates represents a health hazard, particularly for infants.

Each pollutant found in our environment can make its way into our drinking water. This makes it imperative for us to protect our sources of drinking water against contaminants and ensure that those in charge of public systems, as well as the owners of private wells, are well informed.

How can we prevent the contamination of a well?

You have to learn to recognize risks of contamination because, even when a bacteriological analysis fails to detect contamination, every infiltration in your well can contaminate the aquifer and be hazardous to your health. If you draw your water from a surface well or lake, the risk of contamination is considerably higher (bacteria, E. coli, viruses, protozoa, herbicides, pesticides, oil, nitrates, etc.).

Certain soil characteristics, such as cracks in rock formations, sandy or gravelly soil, favour the rapid infiltration of water. Generally speaking, surface wells, sand points, deep well with broken structure or buried under ground, older models of well caps, water accumulation near well, and streams from shallow water tables are more vulnerable to surrounding activities and contamination.

Possible causes of contamination of drinking water are:

- · Inappropriate spreading of mineral and farm fertilizers
- · Inadequate installation of septic systems
- Breaks in the well structure or buried well
- · Disposal of animal waste close to wells
- Excessive lawn fertilization

## • Etc.

If you have doubts, contact a licenced contractor, your municipality or the Ministry of Environment, for more information. We all have a duty to protect our sources of water. Let's give some thought to our health, quality of water, quality of life and that of future generations. Water is life!

What problems can we have with contaminated water?

Pathogenic micro-organisms can cause diseases and be a health risk. Gastrointestinal illness or diarrhoea is the most common disease when waterborne pathogenic micro-organisms are present. Gastrointestinal illness is generally considered to be non-life threatening in normal healthy adults, mortality can occur in sensitive subpopulations, such as infants, the elderly and individuals with immune system problems. Nitrates in water can affect infants less than 6 months old with methaemoglobinaemia. Chimical contaminants can cause different health problems.

How can we solve a contamination in water?

Contact a licenced contractor in the field, we will guide you with the proper steps to solve the problem as regards the application.