



## **Private Water Systems and Wells: Information for homes in neighbourhoods directly affected by the fire**

### **Private Water Supplies**

If you have a private supply, examine the source for obvious signs of degradation (destroyed equipment, debris, water or chemical spillage new well). As always, all water from surface supplies including shallow wells (< 50 ft. deep), are considered to be subject to surface contamination and should be disinfected prior to consumption. Disinfection can take place by boiling water, or through the use of in-house treatment devices. Sample testing for private systems can be done through a private accredited laboratory.

In general, activated carbon filters are good for removing chemicals, chlorine tastes and odours, colour, etc., but not biological contaminants such as bacteria and viruses. Bacteria and viruses can pass through some filters and therefore must be either killed or removed. Heat, chlorine, ultra violet light, and equipment of various designs are commonly used disinfection methods.

High heat is a sure disinfection method, but labour intensive. Cysts of *Cryptosporidium* and *Giardia* are resistant to other forms of disinfection, and are best removed through filtration if boiling is not practical. Filters with an NSF #53 rating or filters that are capable of filtering to 1-micron absolute are adequate for *Cryptosporidium* and *Giardia* cyst removal. Reverse osmosis units remove just about everything, but the specification criteria should be thoroughly checked.

Ultra violet disinfection units work best with clear water, and therefore often require additional filters to remove colour, turbidity, fine suspended material, etc.

If you have a deep well, it may be timely to conduct routine shock treatment. This can be conducted by pouring household bleach into the well and running all taps until a strong chlorine odour is detected. A hose to apply a rinse with this chlorine treated water can be used to disinfect the internal shaft of the well. Open the valve on the top of the pressure tank and ensure the disinfected water coats the entire tank, and leave sit for 24 hours.

### **Deep Well Water Systems**

- If you have a deep well, it may be timely to conduct routine shock treatment.
- This can be conducted by pouring household bleach into the well and running all taps until a strong chlorine odour is detected.
- Using the chlorine treated water, use a garden hose to rinse down the sides of the well. Open the valve on the top of the pressure tank and ensure the disinfected water coats the entire tank, and leave sit for 24 hours.