

DISINFECTION OF YOUR WELL

Wells can become polluted without showing any noticeable difference in taste or smell. It is advisable, as a precaution, to disinfect your well at least once a year.

Contaminated well water is in many cases a hidden danger to which the very young, the elderly and the sick are at most risk.

PROCEDURE FOR DISINFECTING YOUR WELL

This method is for the disinfection of a well water supply, water storage tank, water carrying pipe work and hot and cold-water cylinders. Approximately 1,100 litres of water will be used.

Caution: If you have a filter or any other type of water treatment on any part of your system, consult your supplier before following this procedure. Heavily chlorinated water may affect the filter or the chlorine may be absorbed by the filter rendering the procedure ineffective.

1. To 25 litres of water add 5 litres of a 1% w/v solution of Sodium Hypochlorite.

While we do not endorse any individual products, any one of the following products may be used diluted in 25 litres of water.

(a) 2.5 litres of Milton or similar products with 2% w/v Sodium Hypochlorite.

or

(b) 0.5 litres of Sterichlor or similar products with 10/11% Sodium Hypochlorite.

Disinfection products sold for use on the farm will be acceptable for use in disinfecting wells. However, it is important to seek advice about their use and it is advisable to always use the product in about 25 litres of water.

2. Pour half of the solution into the well.

3. Turn on the drinking water tap in the kitchen and let the water run until there is a distinct smell of chlorine from the water. Then turn off the tap.

4. Turn on all other taps and let the water run until there is a distinct smell of chlorine from the water. Then turn off the taps.

5. Pour the other half of the solution into the well. Turn off the well pump and ensure that the well is covered properly. Allow to stand overnight or for at least 8 hours.

6. After at least 8 hours reconnect the pump. Turn on all taps and let the water run until the smell of chlorine is gone. Turn off all taps.

7. Arrange for the water to be tested.

N.B. This method is only suitable as a once off shock disinfecting procedure and cannot replace a proper treatment system if your water supply needs continuous disinfection.



Féidhmeannacht na Seirbhíse Sláinte
Health Service Executive

HOW WELL IS YOUR WATER?

ADVICE FOR PRIVATE WELL OWNERS

Produced by the South Eastern Regional Zoonoses Committee

(Health Service Executive—South (South East),

Department of Agriculture & Food,

Department of Communications, Marine & Natural Resources,

The City Council of Waterford and The County Councils of Carlow,
Kilkenny, Tipperary South Riding, Waterford and Wexford).

Siting your well contact –	Carlow County Council 059 9170300	Kilkenny County Council 056 7752699	Tipperary South County Council 052 34455	Waterford County Council 058 22000	Wexford County Council 053 9165000
Testing your well water contact –	Carlow Environmental Health Officer 059 9163600	Kilkenny Environmental Health Officer 056 7784016	Tipperary South Environmental Health Officer 052 77000	Waterford Environmental Health Officer 051 842800	Wexford Environmental Health Officer 053 9123522

For more detailed information and technical data contact
the Environmental Protection Agency at 053 9160600
or the Geological Survey of Ireland at (01) 6782000 or Lo-call 1890 449900.

HOW WELL IS YOUR WATER?

Wells and springs are fed by groundwater, that is, the water that is stored in and moves through the pores and cracks in soils and rocks. Groundwater pollution occurs when substances that enter ground water as a result of human activities cause significant deterioration in the water quality. The common pollutants from farming are nitrate, ammonia, chloride, sulphate, bacteria and viruses. Pollutants also come from engineering and other businesses such as oil spillages and leaks. Groundwater pollution has become an increasingly serious problem in rural Ireland, where the vast majority of wells are located.

The primary responsibility for groundwater protection rests with any person who is carrying on an activity that poses a threat to groundwater. Groundwater in Ireland is protected under European Community and National Legislation. Local Authorities and the Environmental Protection Agency (EPA) have responsibility for enforcing this legislation. The Geological Survey of Ireland (GSI), in conjunction with the Department of Environment and Local Government (DELG) and the EPA have issued guidelines which will assist those boring a well and those constructing an effluent treatment system. The safe distance required between a well and a possible source of pollution depends on a number of factors such as:

- The thickness and permeability of subsoil.
- The permeability of the bedrock where the well is tapping the bedrock.
- The groundwater flow direction.
- The relative location of the well and the potential source of pollution.
- Is the well up-or-down-hill of the possible source of pollution?

Because every situation is different, your Local Authority should be consulted before decisions on location of your well are made. In most areas, based on the precautionary principle, a minimum distance of 30 metres is usually advised, but in some cases a distance of more than 100 metres may be required.

If your home is more than 7 years old and your private well water supply is seriously deficient, or, if your home has never had piped water supply, you may be eligible for a grant towards the upgrade of your existing private well water supply or towards the provision of a private well. Further information on grants is available from your Local Authority.

See front page for Local Authority contact details.

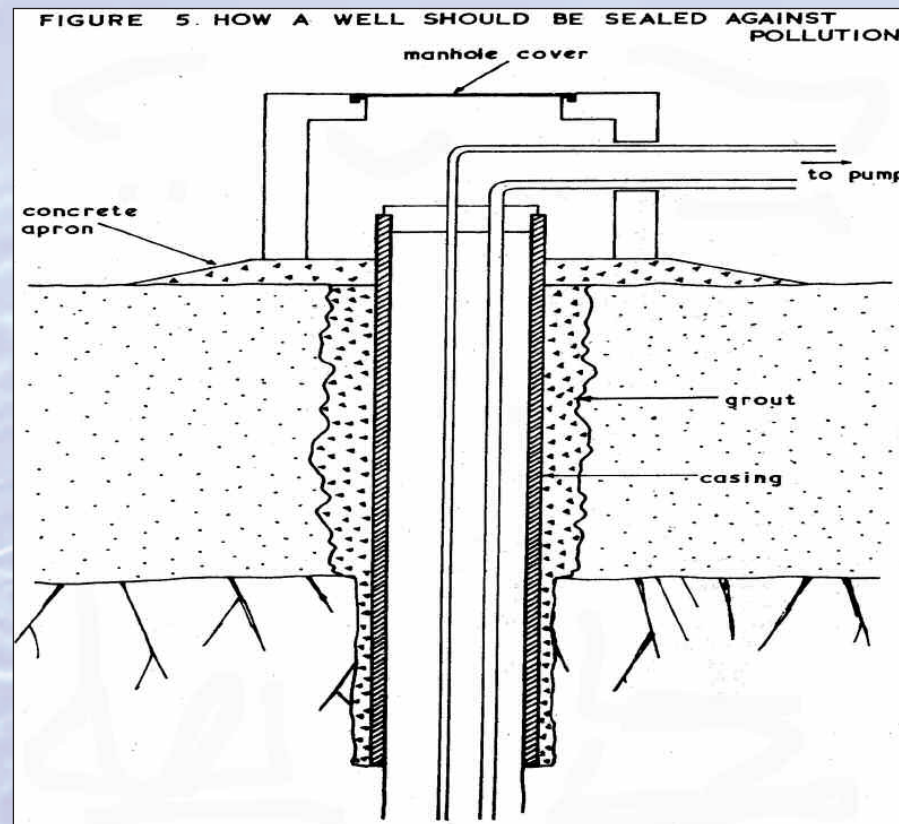
REFERENCES

1. DELG/EPA/GSI, 1999. Groundwater Protection Schemes. Department of Environment and Local Government Protection Agency, and Geological Survey of Ireland.
2. EPA, 2000. Wastewater Treatment Manuals: Treatment systems for Single Houses, Environmental Protection Agency.

PROTECTION OF YOUR WELL

Surface water should not be allowed to run down the well, inside or outside the casing. The ground should be built up around the well so that there is a gradient of at least 1:4 away from the well. The overburden should be sealed by cement, grout or puddle clay.

Oil, fertilizer, pesticides or other chemicals should not be stored or left in the pump house or close to the well. Diesel tanks should be far enough away and banded because leaking tanks of diesel fuel have contaminated some wells in Ireland. (Plan courtesy of the GSI).



TESTING YOUR WELL

It is advisable to have your well water tested once a year for bacterial contamination and once every three years for chemical contamination. Your local EHO will arrange testing (see front page for contact details).