



Guidelines for Hut Managers

No. 10.1 February 2019 *



Private Water Supplies – 1. England & Wales

Scope and context

Club huts that are not supplied with mains water are subject to regulations relating to private water supplies for human consumption. In general terms, a private water supply is any water supply that is supplied to a property that is not provided by a water company. Such supplies may originate from a range of sources including; boreholes, natural springs, and watercourses.

Private water supplies can pose a threat to health unless they are properly protected and treated. They may become contaminated with micro-organisms such as bacteria, viruses and protozoan parasites, or by other substances such as heavy metals. Many micro-organisms are harmless, but some may cause serious illness or even death in vulnerable people.

The regulations

A number of amendments and revisions to the legislation regarding private water supplies that apply to England and to Wales came into force during 2016, 2017 and 2018 – follow the links under 'Relevant legislation' in the reference section on p. 3.

Under these regulations, local authorities are the enforcing authority and must keep records of all the private water supplies in their area. They must also monitor the wholesomeness and sufficiency of every private water supply in their area in accordance with requirements of the supply types defined in the regulations. Each local authority must also carry out a risk assessment of supplies every five years from the implementation of the Regulations in 2010 unless they serve only a single domestic dwelling, but in these cases they must do so if requested by the owner or occupier of the dwelling. In the event that the local authority deems a private water supply to be unwholesome and / or insufficient (but not a risk to human health) then it has a discretionary power to serve an enforcement notice on the relevant persons requiring them to mitigate those risks. If it deems the supply to present a potential danger to human health then it *must* serve a notice on those relevant persons to protect public health. There are serious penalties for those who do not comply with such legal notices served on them by the local authority.

For details of what is involved and the current fees charged for carrying out a risk assessment contact the local authority in whose area your hut is situated. The private water supply to your hut should already be registered with the local authority. For detailed information or guidance as to how the new regulations apply to your hut and also what your responsibilities are with respect to operating and maintaining the supply it is recommended that you contact the appropriate department of the local authority, usually Environmental Health. If you make your hut available to other clubs as opposed to it being available only to club members, it may change how the supply is classed and therefore how it is regulated in terms of monitoring and risk assessment so check with the local authority.

The Drinking Water Inspectorate (DWI) has provided extensive information and guidance on its website that covers the regulatory aspects of private water supplies (see reference section). These hut guidelines have been produced with reference to that information.

* Re. the currency (version no.) of this guideline see the information panel on page 3.

Private Water Supplies – England & Wales

Private water supplies to huts

It is essential to ensure that your private water supply is maintained in good order. If you need to seek further information and advice then refer to the local authority website and / or contact the environmental services department of the local authority.

Measures to ensure that the water is wholesome include –

- Ensuring that the source is protected from contamination by grazing animals or materials washed down from upstream.
- Installing and maintaining an appropriate system that is capable of treating water to a consistently satisfactory quality.
- Ensuring that the water is adequately disinfected prior to use.
- Ensuring that water is stored and distributed in a way that avoids it becoming contaminated after treatment and disinfection but before it is consumed.
- Water piped into the hut and all water for human consumption should be passed through at least a 10 micrometre (micron) filter and then a UV disinfection (sterilization) device.

Points to be considered

- Read the DWI guidance leaflet on private water supplies (see references below).
- Check with the appropriate department (Environmental Health or Services) of the local authority concerning the requirements of the relevant private water supplies regulations.
- If a UV disinfection device is not already operating in the hut then installation of a suitable system should be given urgent priority (see reference section).
- Keep the entire system in good order by establishing routine procedures for frequent inspection and maintenance. Carry out your own basic risk assessment periodically and inform your local authority of any significant changes.

Checklist for risk assessment

When the local authority carries out a risk assessment it will expect you to have –

- A detailed plan of the supply system. A map would be useful.
- A written effective management system of the supply including regular maintenance of the treatment system.
- Alternative supply procedures: Documented contingency arrangements for occasions when the supply becomes insufficient, e.g. during drought.
- A robust and suitably protected source chamber with a watertight lid and smooth watertight internal walls. It needs to be rodent-proof. The top of the chamber needs to be 300 mm above ground level all the way round. For further guidance on protecting your supply see *Protecting your private water supply* in the reference section.
- Suitable and robust treated water storage facilities.
- Drinking water pipework buried 300 mm in the ground.
- An inlet pipe that is checked and cleaned regularly.
- A UV disinfection system that is being maintained in full working order. Follow the manufacturer's operating instructions. See Appendix 1.
- Any other treatment appropriate to identified risks in the raw water.

Information for users

It is recommended that an advisory notice should be displayed to inform users that the drinking water is from a private supply (see Appendix 2).

References >>

Private Water Supplies – England & Wales

References

Relevant legislation

<http://dwi.defra.gov.uk/private-water-supply/regs-guidance/legislation.html>

<http://www.dwi.gov.uk/stakeholders/legislation/index.htm>

Information and advice from the Drinking Water Inspectorate

<http://dwi.defra.gov.uk/private-water-supply/index.htm>

<http://www.dwi.gov.uk/private-water-supply/regs-guidance/Hot-topics.html>

<http://dwi.defra.gov.uk/consumers/advice-leaflets/>

See especially –

Protecting your private water supply (ver. 2, Nov. 2018) a guidance note

<http://dwi.defra.gov.uk/private-water-supply/regs-guidance/Guidance/protecting-your-supply.pdf>

Types of water supply – implications to you

<http://dwi.defra.gov.uk/private-water-supply/users/TypesPWS.pdf>

Guide to the selection of UV disinfection systems

<http://www.dwi.gov.uk/private-water-supply/regs-guidance/Guidance/UV-households.pdf>

Note: Much of the information supplied by the DWI is aimed at local authorities but provides a useful insight into the parameters that the authority will use when assessing a private water supply. See for example –

Assisting the risk assessment – Information required for the risk assessment

<http://dwi.defra.gov.uk/private-water-supply/users/rel%20info.pdf>

Developing action plans

<http://dwi.defra.gov.uk/private-water-supply/regs-guidance/Guidance/action-plans.pdf>

The corresponding hut guideline 10.2 *Private Water Supplies – 2. Scotland* is available on the BMC and Mountaineering Scotland websites (see information panel below).

Note: If viewing this .pdf while online then clicking on any [URL](#) will take you to that website.

About Hut Guidelines

These guidelines have been produced by the Huts Group of the British Mountaineering Council and the Huts Advisory Group of Mountaineering Scotland to assist those operating mountaineering huts in Britain.

Contact the BMC Huts Group by e-mail – huts@thebmc.co.uk or telephone 0161 445 6111.

Contact the Mountaineering Scotland Huts Advisory Group by e-mail – huts@mountaineering.scot

Websites: www.thebmc.co.uk and www.mountaineering.scot

URLs: If any of the URLs (web addresses) given on the preceding pages are found to be 'dead links' please notify huts@mountaineering.scot

Disclaimer: These guidelines were revised on the date shown below and the information herein is believed to be accurate at the time of writing. No responsibility can be accepted for any loss of benefit or entitlement arising through use of these guidelines – they are not intended to be definitive.

Version no. 4 – February 2019

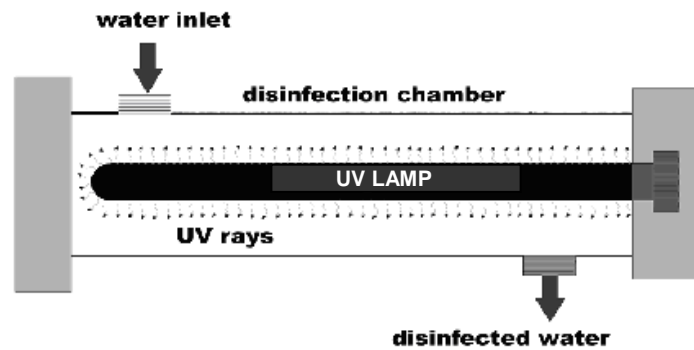
These guidelines are updated periodically; to check on the currency of this version go to one of the websites above where the latest version will always be displayed.

APPENDIX 1

A note on UV water sterilizers*

Water sterilization is normally carried out by irradiation with ultraviolet light of a specific wavelength that kills microbes exposed to it. The construction of a typical unit is shown below.

* From Hut Guideline 10.2



In order for the treatment to be effective it is *essential* that the unit is properly maintained and the manufacturer's instructions should be followed carefully. It is particularly important to note the following –

- The UV striplamp has a finite effective lifetime and should be changed at the interval recommended by the manufacturer. An inexpensive hours-elapsed meter can be fitted if one is not part of the unit. Alternatively, the lamp may be changed every year, irrespective of whether its lifetime has not been exceeded. **N.B.** UV lamps contain mercury and should be disposed of at an approved facility.
- In order to conserve the life of the lamp the UV unit should not be left switched on when the hut is unoccupied but it is recommended that the manufacturer of the sterilizer should be consulted on this point. Users of the hut would need clear instructions to turn it on when they arrive and off on departure and possibly as regards flushing pipework downstream of the sterilizer before use when first arriving at the hut – consult your local authority on the latter point.
- The protective quartz glass sleeve surrounding the UV lamp should be cleaned regularly to remove deposits of organic and/or mineral material that may form on the sleeve and absorb UV light and so significantly reduce the effectiveness of the unit.
- It is recommended that at least one prefilter (ideally 10 micrometres porosity) should be installed upstream of the water inlet to the unit in order to remove particulate material. Particles in the water supply absorb and scatter the UV light and shade the micro-organisms, so the unit cannot operate with 100% efficiency. The filter(s) should be cleaned or replaced regularly. It is also important that the flow rate through the UV unit should not exceed the manufacturer's specifications.

In cases where there is no mains electricity supply, power could be supplied by a small photovoltaic or wind microturbine system to charge storage batteries linked to a small DC/AC inverter. 12 or 24V DC UV units are also available. The power requirement of UV sterilizers is typically only a few tens of watts.

APPENDIX 2

Display of an advisory notice

The regulations regarding private water supplies (PWS) in Scotland differ in some respects from those that apply in England and Wales, see –

<https://www.mygov.scot/private-water-rights-responsibilities/>

The Drinking Water Quality Regulator for Scotland requires that an advisory notice be displayed –

<http://dwqr.scot/private-supply/communications/pws-information-poster>

“All premises where a private water supply is supplied or used as part of a commercial or public activity must display this poster in a prominent place where the public reasonably have access. This includes hotels, holiday let properties and B&Bs.”

A free poster can be downloaded –



There does not appear to be such a requirement in the English and Welsh PWS regulations. Nevertheless, given the trend to litigation for perceived injury nowadays, it may be prudent to display one.

Note that one of the principal exclusions in the combined liability insurance (CLI) provided to members of the BMC is stated as being *Liability arising out of deliberate, dishonest or criminal acts of the Insured*. Follow the link [Read the BMC clubs policy summary here](#) on –

<http://www.bmc-insurance-centre.co.uk/clubs>

A prosecution for infringement of the PWS regulations brought by the relevant authority would be a *criminal* prosecution and the hut managers would have no CLI cover. Anyone injured as a result of failure to comply with the regulations, e.g. contracting an infection as a result of drinking contaminated water, could then bring a legal claim for damages against the hut managers, who would be held personally liable and would be without insurance cover if the action was successful. The only way to minimise liability is to ensure full compliance with the PWS regulations (see lists on page 2), including keeping detailed records of maintenance and of routine inspections.