

Information note on Regulation 6 (Wales)



Requirement to carry out a risk assessment

Although monitoring is a requirement of the Private Supply Regulations (Wales) 2017, sampling and analysis alone cannot provide assurance about the safety of a private water supply. Hence a key aspect of the Regulations is the requirement placed on each local authority to carry out a risk assessment of each private water supply in its area (excluding those to single dwellings where the supply is not used as part of a commercial or public activity or as part of a tenancy agreement) **at least every five years**, unless the local authority is requested to do so.

To assist local authorities in complying with their duties under Regulation 6, The Drinking Water Inspectorate (DWI) has made available on its website a non-commercial government licensed risk assessment tool, with explanatory notes and a link to a training video on the use of the Risk Assessment Lite tool. A local authority may commission an external organisation or individuals to carry out the risk assessments on its behalf, and where this is the case, it will need to be satisfied that the external persons doing the risk assessments are appropriately trained and competent to do so. Local authorities using external persons should audit a small number of the risk assessments to be satisfied that they have been carried out competently and in accordance with the explanatory notes. An external organisation contracted to carry out risk assessments on behalf of a local authority may be authorised by the local authority to use the DWI risk assessment tool for this purpose, on the proviso that the tool WILL NOT be used by that organisation to make any commercial gain outside the contract that has been agreed.

There are 4 versions of the DWI risk assessment tool. Risk assessors should select the most appropriate on a case by case basis:

- 1) A tool which covers a comprehensive range of private water supply arrangements
- 2) A tool for common small supplies that employ simple treatment methods, known as the “risk assessment Lite” tool
- 3) A tool specifically for risk assessing supplies used exclusively for toilet flushing.
- 4) A tool for supplies that originate from mains water and are classified as Regulation 8.

These can be found here:

<http://www.dwi.gov.uk/private-water-supply/local-auth/risk-assessment.html>

For risk assessments carried out after the implementation of the 2017 Regulations, local authorities must use the most up to date version of the DWI risk assessment tool, which can be found on the above website. If a local authority chooses to use an

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alternative methodology, to complete the risk assessment, they must ensure it complies with the standard EN15975-2.

For supplies which have previously been risk assessed and were found to be low risk and well managed, any further assessments may be completed through correspondence with the relevant person(s) to confirm there have been no significant changes. In the absence of any updates however a site visit will be required. Where previous risk assessments were not carried out using the DWI risk assessment tool, local authorities must use approved methodology compliant with EN15975-2 in all subsequent 5 year periods.

As part of the risk assessment local authorities should also check any relevant local hazard information from the Natural Resources Wales, The British Geological Society (BGS), local water company or planning department, e.g. land use changes, pesticide use changes since the last risk assessment, aquifer monitoring data, pollution events, forestry, aquaculture, quarrying etc. If any monitoring failures have occurred since the previous risk assessment then the risk assessment should be updated to reflect the conclusion of the investigation carried out at the time together with any action taken as a consequence of the investigation e.g. advice or notices. Evidence that remedial actions have been completed may be obtained through a site visit or other robust evidence such as photographs showing completed works or invoices from suppliers or installers. The type of evidence needed will depend on the type of work completed and the confidence that the local authority has in the relevant persons. In any case, the local authority should be satisfied that the work has been completed satisfactorily.

Further site visit guidance is available in section C of the Inspectorate's risk assessment tool Explanatory Notes and can be found here:

<http://www.dwi.gov.uk/private-water-supply/local-auth/risk-assessment/RA-explanatory-note.pdf>

Risk assessments are increasingly being used worldwide as an essential part of a drinking water quality surveillance and control programme. The World Health Organisation (WHO) in its latest guidelines¹ states '*the most effective means of consistently assuring the safety of a drinking water supply is through the use of a comprehensive risk assessment and risk management approach that encompasses all steps in water supply from catchment to consumer*'. Risk assessment is a proactive approach to identify the risks (potential failures of standards and risks to human health) and to take action to control those risks **through a multi-barrier** approach (for example, through source protection, treatment of the source water and management of the distribution network to prevent contaminants entering the supply system). The primary objectives of a risk assessment in ensuring good drinking water supply practice are to:

¹ www.who.int/entity/water_sanitation_health/publications/2011/dwq_guidelines/en/

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- identify the risks in the catchment that affect, or could affect, the quality of the source of the private water supply and any control measures that are practical to reduce the risk (for example fencing to prevent animals contaminating surface water sources and protection to avoid surface water entering a borehole by means of a diversion ditch). In many cases, control measures in the catchment or at the source will not minimise the risks sufficiently;
- identify the hazards that need to be controlled by treatment and, if appropriate treatment is not present (this may be the case for many supplies, particularly small supplies), installing and maintaining appropriate treatment processes to remove or reduce the concentrations of contaminants;
- identify the risks of contamination entering the distribution network (for example, through defective tanks and pipework) and taking appropriate action to control those risks (inspections, repairs and maintenance);
- identify the risks of contamination within premises (for example from poor maintenance of pipes and fittings, particularly kitchen taps, and pick up of metals from older plumbing systems (for example, lead) and taking action to minimise these risks (often by providing advice to the owners/occupiers of the properties);
- establish the control measures that are needed and the operational monitoring required (for example operational sampling and analysis for key parameters against warning/alarm limits that are tighter than the standards in the Regulations and routine checks/inspections);
- establish standard operating protocols with appropriate records for treatment and distribution under normal circumstances and protocols for timely remedial action when the monitoring of control measures indicates an operational problem;
- identify any security risks associated with the source, treatment works and distribution network so that measures can be taken to avoid deliberate contamination; and
- verify drinking water quality by establishing routine checks and inspections with appropriate records (e.g. source protection is in place and operating effectively and that disinfection is operational) and by monitoring compliance with the standards and indicator parameter values in the Regulations.

A number of factors determine the priority that the risk assessments should be carried out and these could include:

- the number of people supplied;
- the extent to which the water is used as part of a commercial or public activity;

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- the nature of the source (variable quality surface water, constant quality ground water);
- the amount of treatment; and
- the management and operation of the supply.

Where a risk assessment identifies an actual or potential risk to human health, or a risk of non-compliance with any of the standards or indicator parameter values in Schedule 1 to the Regulations, regulation 18(5) must be applied. The risk assessment must be used as part of the information to enable local authorities to consider whether it can exclude parameters from the monitoring requirements and include any other relevant parameters in addition to those specified in Schedule 1, as informed by the risk assessment (see information Note for regulation 7).

Local authorities must take into account, as part of their risk assessments, any data collected for the purposes of the Water Framework Directive including that collected by Natural Resources Wales and by water companies as part of their raw water monitoring programmes.

Where a private water supply serves premises in more than one local authority's area, to avoid duplication of effort the local authorities should agree that one of them (normally the local authority where most of the premises served are situated) should prepare the risk assessment in consultation with the other authorities and copy the risk assessment to the other authorities.

The local authority should keep a full record of each risk assessment, including those carried out on its behalf. In addition to the requirement to carry out each risk assessment at least every five years, the local authority should review a risk assessment whenever it considers the existing risk assessment is inadequate. Examples of this are where there is any significant change in circumstances in respect of the supply system (such as the deterioration of raw water quality, installation of new treatment process e.tc).

If a local authority becomes aware of a private supply that is to be, or is being used for the first time, a risk assessment must be completed as soon as is reasonably practicable (for further information see Information Note for Regulation 15).

Furthermore, local authorities must within 12 months of carrying out a risk assessment, send a summary of the outcome of that assessment to the DWI (acting on behalf of the Welsh Ministers. See Information Note for regulation 16.

Risk assessments of supplies to single dwellings (SD)

A local authority **MUST** carry out a risk assessment on every private water supply serving a SD in its area that is provided as part of a commercial or public activity or where a SD relying on a private water supply for domestic purposes is rented as part

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of a tenancy agreement. It must also review and update the risk assessment every 5 years (or earlier if it considers that the existing risk assessment is inadequate).

Where water is supplied to a single dwelling that is not used as part of a commercial or public activity or as part of a tenancy agreement, a risk assessment is not required, unless requested by the owner or occupier of the dwelling. .

Risk assessments of Regulation 8 supplies

(See Information note on Regulation 8)

Water supplied to all Regulation 8 supplies will, by their derivation, originate from public supplies. The assets (pipes, tanks etc) through which this water is supplied to consumers of Regulation 8 supplies, must be compliant with The Water Fittings Regulations 1999. The regulator for this is the supplying water company.

Local authorities are not required to be qualified fittings inspectors in order to be competent in risk assessing Regulation 8 supplies. They should however, ensure that relevant staff have gained an appropriate practical level of awareness of the application of these Regulations from qualified water company water fittings inspectors prior to carrying out risk assessment. This should form part of the general competency training and development programme for those staff required to carry out risk assessments under Regulation 6. Where actual or suspected water fittings contraventions that present a risk to human health are suspected on a Regulation 8 supply local authorities are advised to contact their local water company for advice, and where agreed to arrange a joint visit. Both parties should work together to ensure any risks identified are mitigated, using relevant enforcement measures under their respective regulatory powers where applicable. In these cases each local authority are advised to keep comprehensive documented records of its own respective actions.

Contraventions of Water Fittings Regulations should be recorded as hazards in the supply risk assessment and therefore contribute to the supply risk rating and development plan of that assessment. In these instances enforcement to mitigate such risks is the responsibility of the water company.

It should be noted that monitoring requirements (analysis parameters and sampling frequency) for Regulation 8 supplies should be based on the risk assessment. The regulations do not make any provision for Group A and Group B monitoring of Regulation 8 supplies.

Temporary events

There is no requirement for local authorities to carry out a Regulation 6 risk assessment on a supply for a temporary event that is fed from a public supply – either through pipes or via tankers, unless it is a Regulation 8 supply, or supplied by other sources such as borehole, wells, springs etc.

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However, as part of their general duties in protecting public health at all temporary events, local authorities should ensure that any supply intended for domestic purposes are provided in accordance with BS8551 and that the organisers of the event apply a risk-based approach with respect to water supplies.

It is the duty of water companies to regulate and enforce where necessary the Water Supply (Water Fittings) Regulations 1999 at temporary events where there is a physical connection to a public mains supply. Local authorities should alert water companies to any pending temporary events in a timely manner.