

# Information note on Private Distribution Systems



## Background

The Private Water Supplies Regulations<sup>1</sup> do not define a private water supply, the definition is given in the primary legislation (Water Industry Act 1991) and in summary is “any supply of water other than a public water supply provided by a water company, a licensed water supplier or the Council of the Isles of Scilly”. However, within the Private Water Supply Regulations there is reference to ‘Further distribution of supplies from water undertakers or licensed water suppliers’ and this special situation is the subject of this Information Note. Further (onward) distribution deals with those situations where the source of water for a private water supply originates from a public water supply. For convenience this type of private water supply is referred to by the Inspectorate in Guidance<sup>2</sup> and also in this Information Note as a **private distribution system (PDS)**.

The duty of local authorities in relation to any known PDS in its area is to carry out a risk assessment within five years of implementation of the regulations and monitor the supply on the basis of the specific risk assessment.

## Definition of a Private Distribution System:

Water law recognises that the practicalities of securing a domestic supply of water to every dwelling are such that public or private water supplies cannot be defined by reference to the physical assets or the methodology involved in the collection and distribution of water to consumers. Instead, and in keeping with the intention of the law (namely the protection of public health), the law provides for a regime of regulation that focuses on securing the safe management and control of all water supplies. However one consequence of this comprehensive legal framework for identifying and remediating an unwholesome private water supply has been the need for a practical working definition of a PDS to support all those concerned (local authorities, water suppliers and private supply owners/operators) with the task of identifying whether any given water supply arrangement constitutes either a public water supply or a private distribution system. Accordingly, and taking into account the early collective implementation experiences of water companies and local authorities, set out below is a ‘technical working definition’ and a set of principles, which if followed should result in the correct identification of a PDS.

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<sup>1</sup> The Private Water Supply Regulations 2009 (in England) and the Private Water Supply Regulations 2010 (in Wales).

<sup>2</sup> Legislative Background to the Private Water Supply Regulations: Section 9 (E&W) of the Private Water Supplies Manual April 2010 and DWI Information Note on Private Distribution Systems May 2011.

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## ***PDS technical working definition***

A distribution system is an arrangement of physical assets (pipes, tanks and fittings) which together are used to convey a supply of wholesome water to consumers (draw off points on premises).

A private distribution system (PDS) is a particular type of distribution system which comprises two parts in relation to asset ownership, management or control: the first part comprises the assets used by a water undertaker or combined licensee to deliver water to a point on a premises (known as the primary building or boundary)<sup>1</sup> and the second part comprises the assets used by another company, organisation or person who is not the licensed undertaker<sup>2</sup> in order to deliver water to other buildings<sup>3</sup>, domiciles, draw off points<sup>4</sup>, households<sup>5</sup>, properties (known as secondary buildings) via pipes<sup>6</sup>, or otherwise (i.e. by tanker, static tank) usually but not exclusively for commercial purposes<sup>7</sup>.

References in the above definition are as follows:

1. The boundary (or primary building) is the point in the distribution system identified by the water company as representing the end of the first part of the PDS; in effect this is the point where a bulk supply of wholesome water is made available to the third party for further (onward) distribution. The third party is therefore a customer of the water company. Ideally this point will be denoted by a revenue meter but for historic reasons it may be denoted by some other asset such as a tank, air break, check valve or flow meter.
2. A licensed undertaker is a company, organisation or person who is a licensed supplier as defined under Section 17A of the WIA 1991 (and formally recognised as such by Ofwat, the economic regulator). In this Information Note and other guidance licensed undertakers are generally referred to as a water company.
3. In determining whether any secondary building on a premises is served by a PDS it is important to consider whether the building is leased or let by the premises owner and whether a charge inherent in the lease or tenancy agreement includes a cost recovery arrangement for the water company. There is no PDS where the primary building owner/manager is in effect acting as an agent for the water company by collecting the water company's charge and passing it on. In these situations therefore the secondary building is served by a public water supply.
4. A draw off point in this context denotes a water fitting such as a standpipe or tap located on the premises (but not inside a building) where wholesome water is accessible to end users directly or to the third party for the purpose of further (onward) distribution.

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5. The meaning of household is defined in Section 17C of the WIA 1991, that is a place used as a home.
6. Pipes include other assets such as supply pipes, towers, reservoirs and tanks. Not all water mains are in the ownership of a water company. Water mains are often laid by a contractor who may or may not be working for a water company. Unless a water company has adopted a water main (or other relevant asset) then it will be in the ownership of a third party and it is a private main or asset. Private water mains or other assets (permanent or temporary or both) are often a feature in the water supply arrangements on sites used for temporary events on farm or estate land and on other large managed land areas such as forests and parklands.
7. In a PDS the end water user (consumer) does not pay the water company directly or indirectly for the supply of water. The nature of the arrangement between the third party and consumers (users) constitutes a commercial arrangement. However this may not be readily identifiable in documentation; the contract may be implicit rather than explicit, it may be verbal or written and embedded within property deeds, covenants, leases or tenancy agreements. When considering how water is paid for and to whom, local authorities should also consider whether any potential PDS situation might constitute an illegal use of the public water supply (where the public water supply is being used without the knowledge or consent of the water company). It should also be remembered that there can be errors in a water company's customer billing records.

## Identification of a Private Distribution System

The identification of a PDS is not always straightforward and will always need to be on a case by case basis. It will require dialogue between the local authority and appropriate water company staff.

As an overarching principle there should be a presumption by the local authority that a water supply is a public water supply until proven otherwise. For this reason, as a first step to identifying any potential PDS within its area, the local authority should create a location list based on existing local knowledge about any potential secondary buildings. This information should then be passed to the water company for checking against its customer billing records. This joint desk top study to identify a PDS should be carried out before the end of 2014. The following paragraphs illustrate how such a desk top study based on water company billing arrangements may be used to identify a PDS.

Owners and occupiers of secondary buildings are not billed by the water company, therefore, any property with bill payers recorded on the water company billing database is unlikely to be served by a PDS. If all the occupiers of secondary buildings on a single large site (such as a business park, docks or blocks of flats)

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pay water company charges directly or indirectly then the local authority can have confidence that there is no PDS on the site.

If the owner/occupier of a primary building on a large site is the only recorded customer of the water company and the owners or occupiers of secondary buildings are paying the primary building owner/occupier for a supply of water then this is likely to be a PDS situation. This type of arrangement is not uncommon in relation to caravan sites (holiday or permanent) where the owner of the site provides a water supply to the residents who pay them a site fee.

If there is no billing record covering the water supply arrangements for a secondary building, then it is necessary to establish if the occupiers of the secondary buildings are paying for the water supply and if so, to whom payment is made and on what basis the charge is calculated. All meters record volume but not all meters are revenue meters. If the owner/occupier of the primary building collects payment from the occupiers of secondary buildings based on water used, as measured by a revenue meter, and the charges applied are those set by the water company, then the situation is not a PDS. If there is no meter, or if there is a revenue meter but the charges being applied are other than those set by the water company, then the situation is probably a PDS. This can be verified by requesting a document confirming the commercial arrangement from the primary and secondary building owners/occupiers.

However, after consideration of all information related to the charging arrangements, the situation remains unclear or is disputed then it may be necessary to establish whether the supply in a secondary building is under mains pressure. It may also be necessary to determine ownership of certain pipes (or other asset such as meter, storage tank, water tower). These matters are best determined through a site visit by the water company, therefore, in these cases, the local authority should maintain the presumption that this is a public water supply arrangement and hand the matter over to the water company to follow up. Water companies will want to know about the situation because they are required to have an accurate record of all their customers and assets and will want to address any illegal use of the public water supply or any error in billing records.

If a water company subsequently verifies the existence of a PDS then it should notify the local authority and provide all necessary details. This will enable a formal record of the PDS to be set up by the local authority as required by the private water supply regulations.

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## Investigations, risk assessment and remedial action

It is the responsibility of the local authority to investigate and initiate appropriate remedial action if there is evidence that a PDS in its area is supplying water that is not wholesome or the PDS poses a potential danger to human health. Such circumstances may become known to either a water company or a local authority in one of a number of ways: when carrying out a risk assessment or when notified of an unsatisfactory sample result by a laboratory or when in receipt of a consumer water quality complaint.

As part of carrying out any PDS risk assessment or investigating a sample failure or consumer complaint, the local authority needs to take account of the fact that a PDS is always by definition connected to a public water supply and the water company has a direct interest in any adverse findings for two reasons: it could point to a problem with the wider public water supply or it could point to a situation where the PDS poses a risk of contaminating the wider public supply by backflow. In a local authority PDS risk assessment, the characterisation of the water source is in effect a risk assessment of the water company's public supply to the boundary point. The local authority will therefore need to access information in the water company's risk assessment for that water supply zone (Regulation 27 of the Public Water Supply Regulations)<sup>3</sup> and the water company will also need to update its risk assessment (Regulation 27) to assess and mitigate any risk associated with the PDS. The Inspectorate therefore considers that the regime for regulating a PDS is one of co-regulation by the local authority and the water company together. Both have duties which must be discharged in a co-ordinated and consistent manner. In practice this means that PDS records maintained by the local authority should identify the water company and public water supply zone (as the source). The local authority risk assessment process should also require the water company to verify that it has discharged its duties as set out in the paragraph below.

The way by which a water company mitigates any risk from a PDS is through its policy and procedures in relation to backflow risks and water fittings inspections. As a minimum therefore the water company will have assigned private water supplies (including PDS) to a class of risk (1 – 5) in the context of the Water Fittings Regulations 1999 and this classification forms the basis of the water company's inspection and enforcement programme for premises in its area. The Inspectorate

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<sup>3</sup> Regulation 27 of the Water Supply (Water Quality) Regulations 2000 as amended 2007 and the Regulation 28 of the Water Supply (Water Quality) Regulations 2010 (Wales)

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expects water companies through WRAS<sup>4</sup> to put in place a consistent approach to the class of risk assigned to a PDS. For example, the risk class will determine what type of backflow arrangement is required at the boundary point (primary building). However in addition, attention is drawn to other relevant water company duties. The Water Industry Act 1991 states that water companies are responsible for ensuring that water in any pipe connected to its mains is not contaminated and its quality and suitability for domestic use is not 'prejudiced' before use. Therefore, a water company also has a duty which extends beyond the boundary point to points of use within secondary buildings where the supply is delivered by pipes. The Inspectorate expects water companies through WRAS to recognise this duty and for this to be reflected in a consistent manner in relevant company policies and procedures.

Regulation 15 investigations of a PDS should always include the following steps:

1. Verify that there are no other sources of water connected by pipes into the PDS. This maybe a disused or abandoned well or borehole.
2. Establish the cause of the sample failure/consumer complaints. Always consider what is already known about the causes of parameter failures as set out in the Inspectorate's Guidance and Drinking Water annual reports. If the water quality problem is very clearly localised to within a building and the cause is therefore the premises fittings or pipe work, or related to other fittings on the site, then the water company should be asked to carry out a fittings inspection. Depending on the outcome of the inspection, the water company will be able to effect a remedy through a Water Fittings Regulations Notice.
3. If the cause is associated with any other features of the PDS ( storage structure, private mains, pumps, valves or inspection chambers) then the local authority should carry out a risk assessment (if this has not already been done). Where the risk assessment identifies a potential danger to human health, the local authority will be able to effect a remedy through a Regulation 18 notice, otherwise if water is not wholesome, a s80 notice may be served.

## Summary of options for remedial action

- Water company serves a Notice for contraventions of the Water Fittings Regulations 1999. [Note: this depends on the ownership of the primary and secondary buildings. If the buildings are in the same ownership then a Notice under Water Fittings Regulations can be served but if the secondary building has been sold on and is owned by another person, whilst a fittings inspection can be carried out, it may not be possible to serve a notice.]

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<sup>4</sup> WRAS, the Water Regulations Advisory Scheme, provides guidance to the water industry on policies, procedures and practices in relation to enforcement of the Water Supply (Water Fittings) Regulations 1999. They produce information leaflets for particular sectors and settings regarding water supply risk management [www.wras.org](http://www.wras.org)

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- Local authority serves a Notice under regulation 18 of PWS Regulations 2009 or Notice under Section 80 of the Water Industry Act 1991 to remediate any part of the PDS that is giving rise to an unwholesome supply of water or a potential danger to human health.
- Choice of Notice will depend on the exact circumstances which in turn will direct as to which type is most likely to secure effective and timely remediation and appropriate safeguarding of the health of consumers. Sometimes more than one type of Notice may be required where there are multiple different reasons why the PDS is unsatisfactory.

31 October 2011