
February 2016
## Summary

<table>
<thead>
<tr>
<th>Intended audience:</th>
<th>Enforcement Officers</th>
</tr>
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<tbody>
<tr>
<td>Regional coverage:</td>
<td>UK</td>
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<tr>
<td>Purpose:</td>
<td>The purpose of this guidance is to assist enforcement officers determine use of appropriate water supplies in primary production operations on farm in order for them to assist Food Business Operators.</td>
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<tr>
<td>Legal status:</td>
<td>This guidance has been produced to explain the legal requirements in relation to the use of private water supplies in primary production as set out in Annex I, Part A, 4(d) and 5(c) of Regulation (EC) No 852/2004.</td>
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<tr>
<td>Essential actions to comply with regulation(s):</td>
<td>Annex I, Part A, 4(d) and 5(c) of Regulation (EC) No 852/2004 requires that food business operators rearing, harvesting or hunting animals or producing primary products of animal origin, and producing or harvesting plant products, respectively, are to take adequate measures to use potable, or clean water, whenever necessary to prevent contamination.</td>
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REVISION HISTORY

This guidance follows the Government Code of Practice on Guidance. If you believe this guidance breaches the Code for any reason or have any comments, please contact us.

<table>
<thead>
<tr>
<th>Revision No.</th>
<th>Revision date</th>
<th>Purpose of revision</th>
<th>Revised by</th>
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REGULATIONS REFERRED TO IN THIS GUIDANCE

These guidance notes cover separate but parallel regulations in all four countries of the UK.

Details below are of how the regulations are referred to in the text, plus the full name and number of the respective regulation in each country.

**Regulation (EC) No 852/2004 on the hygiene of foodstuffs**

- The Food Safety and Hygiene (England) Regulations 2013 (SI 2013/2996)
- The Food Hygiene (Wales) Regulations 2006 (SI 2006/31 (W.5))
- The Food Hygiene (Scotland) Regulations 2006 (SSI 2006/3)
- The Food Hygiene (Northern Ireland) Regulations 2006 (SR 2006 No 3)


- The Private Water Supplies Regulations 2009 (SI 2009/3101)
- The Private Water Supplies (Wales) Regulations 2010 (SI 2010/66 W.16)
- The Private Water Supplies (Scotland) Regulations 2006 (SSI 2006/209)
- The Private Water Supplies Regulations (Northern Ireland) 2009 (SI 2009/413)

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1 The DWD also applies to public water supplies (i.e. piped mains supplies) which have been transposed into separate Public Water Quality Regulations. However, these regulations are outside the scope of this Guidance. Although not referred to in the text of this Guidance, readers should take note of Council Directive 2013/51/EURATOM, which provides for more specific measures relating to radioactive substances in water intended for human consumption.
INTRODUCTION

1. These guidance notes cover the interpretation of the legislation and are relevant across the UK.

2. The guidance has been developed in response to enquiries about the use of private water supplies for the purposes of primary food production on farms.

INTENDED AUDIENCE

3. The intended audience of this guidance is enforcement officers engaged in delivering official controls and advising Food Business Operators (FBOs) on primary production activities.

ABBREVIATIONS USED IN THIS GUIDANCE

4. For the purposes of this guidance, the following abbreviations have been used

   • PWSR – Private Water Supplies Regulations (this encompasses the regulations for England, Northern Ireland, Scotland and Wales); the individual regulations are listed on page 5.

   • PWS – Private Water Supply

   • FBO – Food Business Operator

PURPOSE AND SCOPE OF GUIDANCE

5. This guidance has been produced for enforcement authorities to explain the legal requirements regarding the use of private water supplies in primary production. It aims to clarify when clean water can be used (as per Annex I to Regulation (EC) No 852/2004) and provide guidance on how to determine the water standard required for specific primary production activities.

6. Enforcement officers should ensure that they are also familiar with the requirements of the PWSR and should advise FBOs appropriately.
7. The scope of this guidance is restricted to the use of clean water in primary production activities that are within the scope of Regulation (EC) No 852/2004. For the purposes of this guidance, the statutory duties of FBOs and the statutory powers of local authorities are confined to those provided by food legislation.

8. In England, Wales and Northern Ireland, the FSA is the Central Competent Authority for food hygiene legislation, which includes water intended for food production use in the context of primary production activities. In Scotland, Food Standards Scotland (FSS) is the Competent Authority. Neither FSA nor FSS are the responsible bodies for the PWSR. It is for the appropriate Drinking Water Regulators to provide advice relevant to the implementation of policy associated with the PWSR. The delivery of the PWSR requirements is normally the responsibility of the local authority (usually the environmental health teams), except for Northern Ireland where it is the Drinking Water Regulator.

9. This guidance document has been developed in consultation with the Drinking Water Regulators in all four countries of the UK which have responsibility for ensuring that water intended for human consumption meets the potable (also known as wholesome) requirements set out in Council Directive 98/83/EC on the quality of water intended for human consumption (the Drinking Water Directive or DWD). This has been transposed into the UK legislation through the implementation of national Regulations listed on page 5 of this document.

**LEGAL STATUS OF GUIDANCE**

10. These guidance notes have been produced to explain the legal requirements in relation to the use of PWS set out in Regulation (EC) No 852/2004, Annex I, Part A, 4(d) and 5 (c). They cannot cover every situation and you need to consider the relevant legislation itself to see how it applies to individual circumstances and enforcement activity. If you do follow the guidance notes they will help you advise FBOs to comply with the law.

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2 Known as the Drinking Water Inspectorate in England, Wales and Northern Ireland and the Drinking Water Quality Regulator in Scotland.

USE OF PRIVATE WATER SUPPLIES IN PRIMARY PRODUCTION

11. For primary production activities (including cleaning), Regulation (EC) No 852/2004 provides for the use of clean water as an alternative to potable water. However, clean water must not be added to any food product as an ingredient, and it must not present a risk of contamination of the food product. Water used in any other circumstances (including for domestic purposes such as drinking, cooking, hand washing, or other sanitary purposes) must comply with the requirements set out in the DWD and PWSR.

What is the definition of potable water?


What is the definition of clean water?

13. Clean water is defined in Regulation (EC) No 852/2004, Article 2 (1)(i) as “clean seawater and fresh water of a similar quality” and clean seawater is defined as “natural, artificial or purified seawater or brackish water that does not contain micro-organisms, harmful substances or toxic marine plankton in quantities capable of directly or indirectly affecting the health quality of food”.

14. Regulation (EC) No 852/2004 does not place specific obligations on FBOs in relation to water sampling or set microbiological/chemical parameters/criteria which must be met. However, primary producers need to follow good hygiene practices and must be able to demonstrate that their operations are managed in a way that controls food safety risks, including those associated with the use of water. FBOs may be able to follow assurance scheme guidelines/advice in order to assist them to follow good hygiene practices.

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4 A supply should be considered potable if:

i. It is a public water supply which complies with Directive (EC) No. 83/98/EC on the quality of water intended for human consumption at the point which it comes from the tap; or

ii. It is a private water supply which complies with Directive (EC) No. 83/98/EC on the quality of water intended for human consumption.
What is primary production?

15. The definition of primary production is contained in Regulation (EC) No 178/2002 Chapter I, Article 3 (17) as ‘the production, rearing or growing of primary products including harvesting, milking and farmed animal production prior to slaughter’. It also includes hunting, fishing and the harvesting of wild products. Annex 1 of this guidance provides examples of the types of operations that are covered under this definition.

16. Primary production operations can involve a wide range of activities that require the use of water. The potential for the water supply to present a food safety risk will be largely dependent on the extent to which the activity brings it into contact with the foodstuff or food contact surfaces and subsequent processing. If water is added to a product as an ingredient, this will fall under the definition of water intended for human consumption as set out in the DWD and PWSR and therefore potable water must be used. Potable water must be used on the final washing and cleaning of fresh fruit and vegetables that may be eaten raw, but clean water could be used for initial washing of crops. A list of ready-to-eat products is provided at Annex 2 of this guidance.

17. Operations that alter a product or introduce new hazards such as peeling and slicing vegetables, bagging salad crops with application of preserving gases are not considered activities associated with primary production. Regulation (EC) No 852/2004, Annex II, Chapter VII, 1 applies to these operations and therefore, except in the case of whole fishery products, potable water is required for such purposes at all times.

18. It should also be noted that in the case of primary production activities where biosecurity is a consideration (particularly in relation to poultry production), best practice advises the use of potable water from the public supply, or from another source, that has been subject to the appropriate treatment and tests for bacteriological quality, and gives satisfactory results. This is required to prevent the spread of animal disease as well as pathogens such as Campylobacter and Salmonella, which can lead to human illness.

Additional provisions are contained in the Private Water Supplies (Scotland) Regulations 2006.
What evidence is sufficient to determine that a water supply meets the definition of clean water?

FBO responsibility

19. Regulation (EC) No 852/2004, Chapter 1, Article 1 (1)(a and b) states that the primary responsibility for food safety rests with the FBO. It is necessary to ensure food safety throughout the food chain, which starts with primary production. Therefore, if the FBO can demonstrate that the water from their PWS used during primary production will not have a detrimental effect on the safety of the food product, this would indicate that the water can be considered clean and is acceptable to use for that particular purpose.

20. The FBO has an on-going responsibility to check that any water used from a private supply is fit for purpose. As environmental factors can change rapidly, they must ensure that they have systems in place to monitor for any changes and are able to take action to remedy any problems or switch to an alternative source should the need arise. The FBO would be expected to be able to demonstrate due diligence.

Enforcement Authorities – suggested approaches

21. In order to determine whether a PWS meets the definition of clean water an enforcement officer should first consider what evidence is already available from the FBO on the quality of the supply. For example, previous testing and results of any risk assessment carried out under the PWSR should be taken into account, or whether there is a Water Safety Management Plan in operation. This information should be available from the local authority environmental health teams. The extent of data collected on a particular supply under the PWSR will be variable, depending on the type of business, and the nature of the water supply. An enforcement officer may decide, on the basis of information provided, that there are no grounds for further investigation of the standard of water being used for a particular activity. However, guidance is given below on possible sources of further information.

22. Evidence to verify that the water can be considered clean may be derived from many sources, which may be considered either individually or in combination. Sources of evidence may include:

- source of the water and its catchment area;
results of water sampling. These could include samples which have been taken for a number of parameters such as micro-organisms, metals, organics, chemicals, etc. Useful assistance could be obtained from “The Review of the use of irrigation water in UK agriculture and the potential risks to food safety” in determining whether a source can be considered as clean which was published in 2007. Please see the link below.
http://www.food.gov.uk/science/research/foodborneillness/organicwaste research/b17programme/b17projlist/b17005/.

environmental conditions, having a bearing on: the probable presence of particular hazards, like livestock or human habitation, in the surrounding area; proximity to sewage treatment; manure and composting facilities; run-off following heavy rainfall or potential localised contamination risks via septic tanks or soak-aways; and industrial operations. Depending on the natural composition of the local land heavy metals may need to be considered.

hygiene arrangements that protect the supply from environmental contamination such as fencing off supply to prevent animal access, appropriate well casing and head maintenance and placement of wells, use of covered storage tanks.

water treatments that eliminate or reduce hazards such as filtration or disinfection treatments. Reference to the treatment manufacturer’s literature is recommended to assess whether the treatment is working properly and being used and maintained in accordance with the manufacturer’s instructions. The literature will also assist in determining whether the treatment method is fit for purpose.

23. Bodies such as the Environment Agency in England, Natural Resources Wales, the Northern Ireland Environment Agency and Scottish Environment Protection Agency may be able to advise how to gather all of the above information.

24. When assessing evidence on the suitability of water against the definition of clean water, consideration should, in all cases, be given to the potential risk of faecal contamination. If sample results are available for faecal indicator organisms such as *E. coli* or Enterococci, these data should be used to inform the assessment. Alternatively, it may be possible to verify that the risks posed by faecal contamination have been addressed through effective treatment of the water supply.
25. If evidence can be provided to show that there are low levels of hygiene indicator bacteria\(^6\) present, and there have not been any changes to the local environmental conditions or the activities being conducted on the surrounding land, then the enforcement authority may consider that further testing and monitoring would be unnecessary. Where historically there has been evidence of faecal contamination, enforcement authorities would have to consider what other monitoring would be appropriate. Sample results alone may not provide adequate evidence of the suitability of the supply. A risk assessment of the supply would provide a more robust assessment of the risk of contamination occurring. This would include a review of whether remedial measures have been taken to mitigate the risk of contamination occurring and/or eliminate the hazard under foreseeable conditions.

**Assessing the need for additional evidence**

26. Further to the basic evidence requirements highlighted in paragraph 22 above, the enforcement officer should be satisfied that the FBO has also assessed the potential for the PWS to be contaminated with chemicals that could compromise the safety of food products through use of the water in their primary production operations.

27. Such assessments should take account of:

- the intrinsic nature of the PWS (i.e. the actual source of supply, whether it is surface, ground or well water), with a recognition that the source may be elsewhere;
- the nature of any pipework used;
- the geological characteristics of the area i.e. presence of metals and radiological substances should be taken into consideration depending on the natural composition of the local land;
- the proximity of the PWS to current or historical industrial processes involving the use or storage of particular chemicals e.g. solvents, plastics;

\(^6\) HDC and FSA factsheet on the implementation of practical food safety and risk assessment providing background information on potential microbial contaminants of fresh produce and the role of microbiological testing of indicator species for water and fresh produce, and the interpretation of laboratory reports within a food safety system. [http://www.food.gov.uk/sites/default/files/multimedia/pdfs/microbial.pdf](http://www.food.gov.uk/sites/default/files/multimedia/pdfs/microbial.pdf)
any other relevant historical activities which could present a contamination risk e.g. waste disposal or industrial waste;

- the use of fertilisers or pesticides on the surrounding land, recognising that such use will usually be seasonal; and

- the intended use of the water supply (i.e. whether there is a risk for residual chemical to contaminate the final foodstuff).

28. If, following their assessment, the Enforcement Officer is still concerned that the PWS may present a risk to the safety of foodstuffs, it may be necessary to consider the need to conduct analytical testing of the water at the point of use.

SCENARIOS

29. The Food Hygiene legislation allows, depending upon the circumstances, the use of potable or clean water to prevent contamination of a food product. It also requires that only safe food shall be placed on the market. Water intended for human consumption is subject to the requirements of Council Directive 98/83/EC (DWD) and PWSR which requires the water to be potable/wholesome. A decision tree is provided in Annex 3 of this guidance to help determine when clean water can be used.

30. It would be reasonable to expect that clean water can be used in a dairy for washing animals, in cooling systems, cleaning and washing down equipment as long as it does not have a detrimental effect on the milk. However, as with all activities, if the supply is also used for human consumption or other domestic purposes or it also serves one or more domestic dwelling and is used for human consumption or other domestic purposes, then the water for those purposes must be potable/wholesome and the requirements of the PWSR apply.

31. It is not unreasonable to suggest that some businesses undertaking primary production will also carry out some form of further processing which would not be considered as primary production. In those instances, the FBO will be required to demonstrate that the water being used for the processing part of the business is of the potable standard. In situations where businesses use two sources of water (one private supply and one from the mains), the FBO will need to ensure that the water used for non-primary production activities is of a potable standard and would need to demonstrate that their food safety
management systems are robust enough to ensure that there is no risk of cross-contamination. FBOs would be required to provide evidence that such systems are in place on the processing side of the business.

**REVIEW**

32. It is planned that this guidance will be reviewed in August 2021. We would welcome feedback from enforcement officers and FBOs on whether this guidance provided the information they required and whether there are any omissions.

**CONTACTS**

33. Further information can be obtained from:

**FSA**

**England**
Jane Tait
Enforcement and Local Authority Delivery Division
jane.tait@foodstandards.gsi.gov.uk

**Northern Ireland**
Gerard Smyth
Primary Production Unit
gerard.smyth@foodstandards.gsi.gov.uk

**Wales**
Local Authority Support and Audit Team
lasupportwales@foodstandards.gsi.gov.uk

**Food Standards Scotland**
Jacqui Angus
Enforcement Delivery
jacqueline.angus@fss.scot

**PWS GUIDANCE**

34. Below are the official websites of the water regulators in the UK. Links have been provided for information to the relevant pages on PWS.
- For England and Wales
  http://dwi.defra.gov.uk/stakeholders/private-water-supplies/index.htm

- For Scotland
  http://www.dwqr.org.uk/private-supply/what-does-private-supply-mean-for-me

- For Northern Ireland
  https://www.doeni.gov.uk/topics/water/drinking-water-quality#toc-2
ANNEX 1

PRIMARY PRODUCTION OPERATIONS

Primary production of food is defined as “the production, rearing or growing of primary products including harvesting, milking and farmed animal production prior to slaughter. It also includes hunting and fishing and the harvesting of wild products”.

Primary production\(^7\) of food includes amongst other things:

- production, rearing or growing of plant products such as grains, fruits, vegetables and herbs as well as their transport within and storage and handling of products (without substantially changing their nature) at the farm and their further transport to an establishment;
- production, rearing or growing of food-producing animals at the farm and any activity linked therewith as well as the transport of meat-producing animals to a market, a slaughterhouse or the transport of animals between farms;
- deer and bird game larders
- production, rearing and growing of snails at the farm and their possible transport to a processing establishment or to a market;
- milking and the storage of milk at the farm;
- production and collection of eggs at the producer’s premises, but not egg packaging operations;
- fishing, the handling of fishery products (without changing their nature substantially) on board vessels (except freezer and factory vessels) and their transport to the first establishment (including auction halls) on land. This includes the fishing, handling and transport of fish caught in fresh water (rivers, lakes);
- production, rearing, growing and harvesting of fish in aquaculture farms and their transport to an establishment;
- production, rearing, growing, relaying and harvesting of live bivalve molluscs and their transport to a dispatch centre, purification centre or processing establishment;
- harvesting of mushrooms, berries, snails etc. in the wild and their transport to an establishment;

\(^7\) The final wash of produce intended to be Ready to Eat is not included in the scope of primary production.
• activities at the point of primary production that improve their presentation, such as washing and trimming of vegetables, sorting and grading of fruit etc., drying of cereals, gutting and refrigeration of fish; and
• cress beds and growing herbs.
ANNEX 2

READY-TO-EAT CROPS

The ready-to-eat crops listed below are those that can reasonably be expected to be eaten without any further processing, other than washing, to reduce microbiological contamination.

<table>
<thead>
<tr>
<th>Top Fruit</th>
<th>Salad and Soft Fruit</th>
<th>Horticulture</th>
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</thead>
<tbody>
<tr>
<td>Top fruit (apples, pears etc.)</td>
<td>Lettuce and leafy salads</td>
<td>Soil based protected cropping (including tomatoes, cucumbers, peppers, cress etc.)</td>
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<tr>
<td>Stone fruit (plums, cherries etc.)</td>
<td>Radish</td>
<td>Mushrooms</td>
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<tr>
<td>Vines</td>
<td>Onions</td>
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<tr>
<td>Nuts</td>
<td>Beans (including runner, broad and dwarf French)</td>
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<td></td>
<td>Vining peas</td>
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<td>Podded peas sold fresh</td>
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<td></td>
<td>Mangetout</td>
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<td>Cabbage</td>
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<td></td>
<td>Cauliflower</td>
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<td></td>
<td>Calabrese/broccoli/kale</td>
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<td></td>
<td>Courgettes</td>
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<td></td>
<td>Celery</td>
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<td></td>
<td>Red beet</td>
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<td></td>
<td>Carrots</td>
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<td></td>
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<td></td>
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<td></td>
<td>Celeriac</td>
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<td></td>
<td>Fennel</td>
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<td></td>
<td>Soft fruit (currants and berries)</td>
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ANNEX 3

Decision tree to assist in deciding when potable or clean water can be used in during primary production activities. FBO’s are advised to discuss with their enforcement body for individual advice.

Is the water from a private supply?

Mains supply already meets potable/wholesome standard

Is the water being used during primary production activities?

Water must meet potable/wholesome standard, if being used for non-primary production food activities or is used for human consumption

Is the water added to the food as an ingredient?*

Is the supply used for any domestic purpose or also serves separate domestic dwellings?

Potable or clean can be used

*This is not a primary production step but has been included to illustrate that clean water cannot be added as an ingredient.