

Discharge to drains from domestic properties

This guidance note provides practical information on what can legally be discharged to a drain by signposting the reader to the legislation and its accompanying guidance.

It describes best practice when draining wastewater from a domestic property.

Domestic wastewater

Plastic pipes and fittings are commonly used to drain domestic wastewater from bathrooms, kitchens and utility rooms into a drain and ultimately into the public sewer.

Across the UK, Building Regulations require that an adequate system of drainage is provided to carry wastewater from appliances within the building. This means waste from sanitary appliances (e.g. WCs, washbasins, baths, showers) and water which has been used for food preparation, cooking or washing of clothes.

The type of waste defined as 'domestic sewage' or 'domestic wastewater' and therefore permitted to be discharged to a drain and ultimately a sewer is described in national legislation. In practice, there is such a wide range of household cleaning products, personal hygiene products, food waste macerators, cleaners and materials from DIY activities, it can be difficult to establish what can or cannot be poured down the sink or flushed away.

Note: Other waste would typically be considered as trade effluent for which consent to discharge to a public sewer is required. This guidance does not cover discharge from commercial and trade premises.

Draining wastewater from a domestic property

The drainage system from a domestic property typically comprises sanitary pipework (waste pipes, fittings and traps), an internal or external soil stack, and a drain (pipes, gullies, and inspection chambers) from the house to the public sewer. Products designed for drainage systems and manufactured to the relevant standards are suitable for use with the discharges permitted by national legislation.

Note: The BPF Pipes Group provides information on the correct standards to use when specifying products for domestic drainage applications, <https://bpfpipesgroup.com/technical-information/specification-guidance>.

These products are manufactured from various plastics which have a range of properties and differ in their resistance to chemicals. Care should therefore be taken when mixing household chemicals.

The following table identifies possible chemical risks which might occur from domestic activities and the best way of dealing with these.

<p>Cooking <i>Hot water, food, waste</i></p>	<p>Cool cooking liquid to below 76°C before pouring it down the drain. <i>In practice, plastic pipework can tolerate non-hazardous hot liquids such as vegetable cooking water for short periods (up to 95°C for less than 2 minutes).</i> <i>Note: National legislation places limits on discharge of hot liquids into the public sewers.</i></p> <p>Never dispose of food waste or oils in the sink. <i>Food waste or oils are not directly harmful to the pipework but may solidify and cause blockages requiring chemical or mechanical drain cleaners.</i></p>
<p>Personal washing and haircare <i>Soap, shampoo, hair treatment products</i></p>	<p>Use hair treatment products including bleaches and dyes according to instructions on the label. <i>Products for personal washing are diluted in use and are not harmful to pipework.</i></p> <p>Never pour undiluted personal care products into the sink. <i>Undiluted products such as hand sanitisers, perfumes, aromatherapy oils and solvents like nail varnisher remover may be harmful to the pipework.</i></p>
<p>Clothes and dish washing <i>Laundry and dishwasher powder and liquid</i></p>	<p>Use fabric treatment products bleaches and dyes according to instructions on the label. <i>Products for domestic laundry and dishwashing are diluted in use and are not harmful to pipework.</i></p>
<p>Household cleaning <i>Disinfectant, bleach and chlorinated cleaners, kitchen and bathroom cleaners</i></p>	<p>Dilute chemicals according to manufacturer's instructions. Always read and follow instructions regarding disposal of chemicals. Never pour leftover undiluted products into the sink. Never use acidic drain cleaning products with a pH less than 2.0 or alkaline products with a pH above 12.5. <i>Highly acidic or alkaline products such as concentrated sulphuric acid or caustic soda will damage pipework.</i></p>
<p>Toilet flushing <i>Human waste, toilet paper</i></p>	<p>Only flush the 3Ps – Pee, Poo and (toilet) Paper. Never flush wet wipes, tissues, cotton wool, paper hand towels, sanitary products etc. <i>These products are not directly harmful to the pipework but may lead to blockages requiring chemical or mechanical drain cleaners.</i></p>

Supporting information: legislation and accompanying guidance

a) Legislation

All national legislation can be checked and consulted at legislation.gov.uk. In relation to all aspects of sewerage services in the UK, the following apply.

England and Wales	Scotland	Northern Ireland
Water Industry Act 1991 Water Industry Act 1999	Sewerage (Scotland) Act 1968	The Water and Sewerage Services (Northern Ireland) Order 2006
The Building Regulations 2010 and Approved Document H (available at https://www.gov.uk/government/collections/approved-documents)	Building (Scotland) Regulations 2004 and Building Standards Technical Handbooks (available at https://www.gov.scot/policies/building-standards/monitoring-improving-building-regulations/)	Building Regulations (Northern Ireland) 2012 and Building Regulations Technical Booklets. Technical Booklet N - Drainage October 2012 (available at https://www.finance-ni.gov.uk/articles/building-regulations-technical-

b) Use of sewers for discharge of domestic wastewater and restrictions

England and Wales—Use of sewers and drains for discharge of domestic wastewater

Clause 117 of the Water Industry Act explains what is deemed to be covered by the term "domestic sewerage purposes", Clause 117 is shown on the next page. For anything else, consent is required to discharge into a public sewer and is covered by Chapter III of the Act, Trade Effluent.

Requirement H1 of the Building Regulations 2010 requires that an adequate system of drainage shall be provided to carry foul water from appliances within the building to the sewer. In this context, H1 states that 'foul water' means wastewater which comprises or includes: (a) **waste from a sanitary convenience**, bidet or appliance used for washing receptacles for foul waste; or (b) water which has been used **for food preparation, cooking or washing**.

England and Wales — Restriction

Clause 111 of the Water Industry Act prohibits discharge of waste above 43°C (this is around the temperature of domestic hot water for personal washing), flammable liquids, and any products or chemicals which might damage the fabric of the drain or sewer or interfere with the operation of wastewater treatment processes. Clause 111 is shown on the next page.

Water Industry Act 1991 Chapter II PROVISION OF SEWERAGE SERVICES

111 *Restrictions on use of public sewers*

(1) Subject to the provisions of Chapter III of this Part, no person shall throw, empty or turn, or suffer or permit to be thrown or emptied or to pass, into any public sewer, or into any drain or sewer communicating with a public sewer—

(a) any matter likely to injure the sewer or drain, to interfere with the free flow of its contents or to affect prejudicially the treatment and disposal of its contents; or

(b) any such chemical refuse or waste steam, or any such liquid of a temperature higher than forty-three degrees Celsius, as by virtue of subsection (2) below is a prohibited substance; or

(c) any petroleum spirit or carbide of calcium.

(2) For the purposes of subsection (1) above, chemical refuse, waste steam or a liquid of a temperature higher than that mentioned in that subsection is a prohibited substance if (either alone or in combination with the contents of the sewer or drain in question) it is or, in the case of the liquid, is when so heated—

(a) dangerous;

(b) the cause of a nuisance; or

(c) injurious, or likely to cause injury, to health.

Water Industry Act 1991 Chapter II PROVISION OF SEWERAGE SERVICES

117 *Interpretation of Chapter II*

“domestic sewerage purposes”, in relation to any premises, means any one or more of the following purposes, that is to say—

a) the removal, from buildings on the premises and from land occupied with and appurtenant to the buildings, of the contents of lavatories;

*(b) the removal, from such buildings and from such land, of water **which has been used for cooking or washing**; and*

*(c) the removal, from such buildings and such land, of **surface water**;*

but does not, by virtue of paragraph (b) of this definition, include the removal of any water used for the business of a laundry or for a business of preparing food or drink for consumption otherwise than on the premises.

Northern Ireland—Use of sewers and drains for discharge of domestic wastewater

For Northern Ireland, Clause 174 of the Water and Sewerage Services (Northern Ireland) Order explains what is deemed to be covered by the term "domestic sewerage purposes". This is the same as Clause 117 for England and Wales.

Requirement 79 of the Building Regulations (Northern Ireland) 2012, requires that a system of drainage shall be provided to carry foul water and rainwater from appliances within the building. In this context, "Foul water" means waste from a sanitary appliance and water which has been used for cooking or washing purposes and not contaminated by trade effluent.

Northern Ireland—Restriction

For Northern Ireland, clause 168 prohibits discharge as Clause 111 for England and Wales.

Scotland — Use of sewers and drains for discharge of domestic wastewater

Clause 59 of the Sewerage (Scotland) Act 1968 explains what is deemed to be covered by the term "domestic sewage", that is "sewage which is not surface water or trade effluent", where surface water is "run-off of rainwater from roofs and any paved ground surface within the curtilage of premises" and trade effluent is "any liquid which is wholly or in part produced in the course of any trade or industry carried on at trade premises....."

Scotland — Restriction

None stated.

c) Guidance

England and Wales: Part H to the Building Regulations 2010

Guidance is provided on the construction and maintenance of wastewater systems but does not comment beyond the provisions of Requirement H1 (see above) as to the type of discharges.

Scotland: Building Standards: Technical handbooks

Standard 3.7 requires that facilities for the separation and removal of oil, fat, grease and volatile substances from the system are provided. This does not, however, apply to a dwelling.

For non-domestic properties, limited guidance is given on separator systems.

Northern Ireland: Technical Booklet N

Guidance is provided on the construction and maintenance of wastewater systems but does not comment beyond the provisions of Requirement 79 (see above) as to the type of discharges.

England and Wales: NHBC Standards 2021

Chapter 5.3 provides guidance on design and construction of foul, surface water and ground water drainage systems. It requires that "Drainage systems shall be constructed with materials that ensure satisfactory service over the life of the system" but does not comment on the type of discharges from buildings.

BS EN 14654 Part 4: Drain and sewer systems outside buildings — Management and control of activities: Part 4: Control of inputs from users. BSI, 2021.

This British Standard is applicable to drain and sewer systems from the point where wastewater leaves a building, roof drainage system, or paved area, to the point where it is discharged into a wastewater treatment plant or receiving water body. It identifies the possible impacts of inappropriate inputs to the wastewater system by users.

Information on possible criteria for assessment of generally inappropriate inputs is given in Annex B.

BS EN 12056-2: Gravity drainage systems inside buildings - Sanitary pipework, layout and calculation. BSI, 2000.

This British Standard is applicable to drainage systems inside dwellings, commercial, institutional and industrial buildings. It makes limited provision for drainage systems conveying trade effluent.

FWR report "Household Chemicals and the Water Environment". FWR, 2012.

This review of current knowledge (ROCK) considers the wide range of chemicals used in the home and garden and which might legitimately or otherwise be discharged to drains. It summarises the impact of these on the environment and wastewater treatment processes. (www.fwr.org)

WIS 4-02-06 Fine to Flush: Specification for a testing methodology to determine whether a product is suitable for disposal through a drain or sewer system. Water UK, 2019.

(<https://standards-board.water.org.uk/wis-ign>)