

Small Sewage Discharges – England & Wales

Scope and context

These guidelines are designed to help hut managers to understand the requirements of the new regulations governing small sewage discharges and how these relate to mountain huts. These requirements need to be borne in mind with regard to the current operation of huts and any improvements that are planned and implemented.

LEGISLATION

General Binding Rules

Currently small sewage discharges are regulated by Environmental Permitting (England & Wales) Regulations 2010, 2014 and 2016. EPR 2014 came into force on 1st January 2015. It created General Binding Rules (GBRs) for septic tanks or small sewage treatment plants for domestic use.

Septic Tank Regulations 2020

Discharges into surface water

Under the new Environment Agency GBRs any septic tank treatment system that discharges directly into surface water, such as a ditch, stream, river etc, must by 1st January 2020 be replaced or upgraded to a full sewage treatment plant, for example by installing a package treatment plant. Package treatment plants must meet the relevant British Standard – BS EN 1256 for small treatment plants.

Discharges into the ground

Septic tanks discharging into the ground using a drainage field (infiltration) are not affected by these regulations always provided they do not contaminate private water supplies and ground water in Special Protection Zones (SPZs) or Sites of Special Scientific Interest (SSSIs). They do need to comply with BS 6297 2007.

Registration

England – There is no need to register a septic tank or sewage treatment plant provided discharges do not exceed 2 cubic metres into the ground or 5 cubic metres into surface water per day. Discharges that exceed these limits may need permits from the Environment Agency.

Wales – All septic tanks and sewage treatment plants must be registered with Natural Resources Wales. See page 4.

Note: All septic tank installations require planning permission and must comply with current building regulations. For further information contact your local authority.

Sewage systems

You may have either a septic tank or a sewage treatment plant to deal with the sewage from your hut.

Septic tank >>

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Septic tank

This is a simple tank, which may be rectangular or spherical, usually buried in the ground with an inflow from the hut and an outflow from the tank. It is essentially a bioreactor where bacteria break down organic matter under anaerobic conditions. Solid matter settles in the tank and the liquids flow out. The outflow requires further treatment and this is normally achieved by soaking it away into the ground, via an infiltration system or drainage field where bacteria in the soil complete the treatment process.

A septic tank requires regular maintenance, including periodical removal of the accumulated solid matter (sludge) at the bottom of the tank, a process is known as de-sludging. Care should be taken as to what is input to the tank (see links on page.5).

Package sewage treatment plant

A package treatment plant (may also be referred to as a packaged treatment plant) is like a mini sewage works and produces cleaner effluent than a septic tank. Normally, effluent from a package treatment plant can be discharged to surface waters such as rivers and streams.

Such a plant normally requires a source of power as well as more frequent maintenance than a septic tank and, like a septic tank, it needs to be de-sludged from time to time.

Note: *If you already have a modern treatment plant installed, or are going to install one, then maintenance is far more critical than that of a septic tank. Misuse of the system can result in expensive repairs and warnings should be displayed to inform hut users. Reference should be made to all non-degradable solids, even coffee grains, and even the use of wet-wipes has caused expensive problems.*

General Binding Rules

GBRs replaced the exemption registration system in England on 1st January 2015. Septic tanks and treatment plants must now comply with the General Binding Rules (see below). They need to be checked to ensure that they –

- Do not pollute surface water or ground water.
- Are maintained in accordance with the manufacturer's instructions.
- Are regularly de-sludged.
- Are used only for domestic sewage.

Permits

You will need a permit for your septic tank or treatment plant if it does not comply with the GBRs. For example –

- Discharges a large amount of effluent (more than 2 m³ a day to a ground infiltration system or more than 5 m³ a day into surface water).
- Is in a sensitive area, such as near a private water supply (streams, wells and boreholes), a Groundwater Source Protection Zone, a Drinking Water Safeguard Zone or a Site of Special Scientific Interest.

Whether you need a permit or not, you will have to follow the General Binding Rules that apply to all small sewage discharges. For information see this webpage and the relevant downloadable .pdfs –

www.gov.uk/government/publications/small-sewage-discharges-in-england-general-binding-rules

These rules have been effective from 1st January 2015 and apply to both existing and new discharges. There is also a guidance note for complying with permits –

www.gov.uk/comply-with-septic-tank-and-sewage-treatment-plant-permits

This guidance note covers maintenance, checking for pollution and keeping records.

The septic tank or treatment plant must be emptied at least once a year by a registered waste carrier. Written records of all incidents of accidents and of maintenance must be kept.

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The general guidance document gives some basic indication for estimating the volume of your discharge based on occupancy. There has been some indication that the Environment Agency may allow for the part-time occupancy situation prevalent at club huts.

A permit is required in certain cases. These include Sites of Special Scientific Interest (SSSIs), Ramsar sites (wetlands that are of international importance, see p. 5) and Special Areas of Conservation and Protection (SACs, see p. 5). You can check with the EA whether you are in a sensitive area: Tel. 03708 506 506.

If you have to apply for a permit then there is an online form at –

www.gov.uk/government/publications/application-for-an-environmental-permit-part-b65-discharging-up-to-15m3-a-day-into-ground-or-up-to-20m3-a-day-to-surface-water

You will need a 12 digit grid reference (see p. 5), a discharge calculation and a suitable plan.

GBRs for new and existing discharges to ground via an infiltration system or drainage field

- The discharge must be 2 m³ or less per day.
- The discharge must be outside a Groundwater Source Protection Zone.
- The discharge must be at least 50 m from any well or borehole that is used to supply drinking water (check with neighbours).
- The sewage must receive adequate treatment via a septic tank and infiltration system/drainage field in accordance with the relevant British Standard requirements in force at the time of installation.
- There must be no discharge to surface water.
- The discharge must not be within 30 m of a public foul sewer – this applies to *new* discharges only.
- The discharge must be more than 50 m from a designated European site, Ramsar site (wetland of international importance), Site of Special Scientific Interest (SSSI), or any locally identified protected site or species (the EA will check this for you) – this applies to *new* discharges only.
- The discharge outlet from the treatment system must be installed in accordance with the current relevant British Standard – this applies to *new* discharges only.
- The system should be sized in accordance with *British Water, Code of Practice, Flows and Loads - 3* – this applies to *new* discharges only.
- The occupier must have obtained any necessary planning and building control approval for the treatment system – this this applies to *new* discharges only.

GBRs for existing and new discharges to surface water –

- The discharge must be 5 m³ or less per day.
- In tidal waters, the discharge outlet must be below the low water mark.
- The sewage must receive treatment from a package sewage treatment plant.
- The discharge must not be within 30 m of a public foul sewer – this applies to *new* discharges only.
- The discharge must be made to a watercourse that normally contains water throughout the year. It cannot be to an enclosed lake or pond – this applies to *new* discharges only.
- Any partial drainage field employed must be installed within 10 m of the bank side of the watercourse – this applies to *new* discharges only.
- The discharge must be more than 50 m from an identified bathing water or a designated shellfishery – this applies to *new* discharges only.



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- The discharge must be more than 500 m from a designated European site, Ramsar site, Site of Special Scientific Interest, or any locally identified protected site or species (the EA will check this for you) – this applies to *new* discharges only.
- The system should be sized in accordance with *British Water, Code of Practice, Flows and Loads - 3* – this applies to *new* discharges only.
- The occupier must have obtained any necessary planning and building control approval for the treatment system – this applies to *new* discharges only.

Notes:

- (1) *One cubic metre (m³) is equivalent to 1,000 litres or 220 gallons.*
- (2) *The EA may not be prepared to accept an average discharge volume from any site. Usually the EA insists that it must be for the maximum potential discharge volume of the sewage system. It may be possible to negotiate a lower figure based on variable occupancy of the hut.*
- (3) *Discharge volumes greater than the above figures are not exempt and an application for a permit will be needed. Currently the permit costs £125 – check the current charge.*
- (4) *To determine whether your discharge is located in a Groundwater Source Protection Zone follow the links on the page on the EA's website "What's in Your Backyard?" – www.environment-agency.gov.uk/homeandleisure/37793.aspx*

WALES – LEGISLATION

Registration

Properties in Wales that have a septic or package treatment plant must register with Natural Resources Wales (NRW). This is a legal requirement. For most people this is a free and one-off registration. It is subject to the following criteria –

- The septic tank discharges into the ground using a drainage field (infiltration) and the property has less than 9 people living there.
- The package sewage treatment plant discharges to a watercourse and the property has less than 33 people living there.
- Sewage system is not near a protected or designated area for the environment, e.g. a Site of Special Scientific Interest, or for drinking water supplies, e.g. a Groundwater Source Protection Zone or a Drinking Water Safeguard Zone.

Provided the criteria are met then you can register for free exemption. If not then you must apply for an environmental permit.

By registering the discharge with NRW the club, the registered occupier of the hut, can be exempted from the need to hold an environmental permit for that discharge.

All discharges to the ground or to a watercourse need a consent to discharge from NRW. Before installing a septic tank or package treatment system it is advisable to contact the NRW at an early stage.

Natural Resources Wales has been prepared to allow for the part-time occupancy situation prevalent at club huts and to accept a lower figure that for the accommodation provided by the hut, say 25 instead of 35. Package sewage treatment plants need to work at their capacity. Therefore there is little point in installing a plant to treat the sewage from a hut which can accommodate 35 people when the average occupancy rate is only 25 or even less.

You can register a water discharge or groundwater exemption by completing and submitting a form by post or by e-mail to Natural Resources Wales.



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Registration (continued)

You can download the appropriate forms from this webpage –

<https://naturalresources.wales/permits-and-permissions/water-discharges-and-septic-tanks/?lang=en>

GENERAL POINTS – ENGLAND AND WALES

1. Grid reference: If you have to apply for a permit or register your septic tank or packaged sewage treatment plant you will need to provide the Environment Agency or Natural Resources Wales with the exact location of the discharge identified by a 12-character National Grid Reference.

Note: A GPS reading will provide a 10 figure grid reference number (GRN) of the location preceded by the two letters of the 100km square where the location is situated. These letters are also represented by two numbers which are added to the other 10 numbers. Snowdonia is in square SH whose numbers are 23, e.g. GRN 58491 61003 – the 12 figure GRN would be **258491 361003**. See UK Grid Reference Finder <http://gridreferencefinder.com>

2. Record keeping: Following registration, records must be kept to demonstrate that the treatment system is being maintained appropriately from the date of the registration.

WEBSITES

Home pages

Environment Agency www.gov.uk/government/organisations/environment-agency

Natural Resources Wales www.naturalresources.wales

Ramsar www.ramsar.org

British Standards www.britishwater.co.uk/Accreditation-Certification/certified-small-wastewater-treatment-systems-for-up-to-50-pt.aspx

Septic tanks

How they work www.youtube.com/watch?v=uuORuwb4cfs

Care and maintenance www.wikihow.com/Care-for-a-Septic-System and
www.nesc.wvu.edu/pdf/ww/septic/pl_fall04.pdf

Treatment unit for fitting to an existing septic tank www.mantair.com

Package treatment plants

How they work www.biorock.co.uk and

www.klargester.com/products/BioDisc-BA-BD.htm

Special Areas of Conservation and Protection (SACs)

<http://jncc.defra.gov.uk/page-23>

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

About Hut Guidelines

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About Hut Guidelines

These guidelines have been produced jointly 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 MScot Huts Advisory Group by e-mail – huts@mountaineering.scot

Websites: www.thebmc.co.uk and www.mountaineering.scot (click on 'Clubs' then 'Huts')

URLS: If any of the URLs (web addresses) given on the preceding pages are found to be 'dead links' please notify huts@mountaineering.scot There may be problems when using older versions of some browsers so please first check the version and update if necessary.

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 of entitlement arising through the use of these guidelines – they are not intended to be definitive.

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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.