



Guidance for Pollution Prevention

Micro-breweries and micro-distilleries: GPP29

March 2019 (Version 1.)

This guidance has been produced by Natural Resources Wales (NRW), the Northern Ireland Environment Agency (NIEA) and the Scottish Environment Protection Agency (SEPA).

For Northern Ireland, Scotland and Wales, this document provides guidance on environmental legislation. These guidelines are not endorsed by the Environment Agency for use in England, however, you may find them useful. For guidance on environmental regulations in England go to <u>www.gov.uk</u>

To find the relevant regulations visit www.legislation.gov.uk

Guidance for Pollution Prevention (GPP) documents are based on relevant legislation and reflect current good practice. Following this guidance will help you manage the environmental responsibilities to prevent pollution and comply with the law.

If you cause pollution or allow it to occur, you may be committing a criminal offence. Following these guidelines will help you reduce the likelihood of an incident. If one does occur contact the environmental regulator immediately on the hotline number **0800 80 70 60**

1. Introduction

The main users of this guidance will be small/micro breweries and distilleries. A microbusiness is usually defined as one with fewer than 10 employees, and the volume of product is often used to define "craft" or "micro" breweries and distilleries.



Where guidance refers to a legal obligation it will be highlighted.

This guidance could be of interest to all breweries and distilleries, but it is aimed mainly at breweries and distilleries which define themselves as "Craft" or "Micro". A common feature may be that they do not have dedicated staff specialising in environmental legislation.

This guideline provides an overview of the environmental regulations that you may need to comply with, and it provides good practice advice that can help you to minimise your environmental impacts.

Environmental good practice can be an essential part of your business ethos: it can help develop sales, create good relationships with customers and, importantly, save you money.

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Scotch Whisky Association

2. Purchasing goods and services

Why buy sustainable goods and services?

There's no legal requirement for you to purchase sustainably, or to buy sustainable goods and services, but it could help you to:

- save money and reduce your materials, equipment and running costs, eg reducing the volume of waste you send to landfill could lower your operating costs, and by using energy and water efficiently you can significantly cut your utility bills
- win new business and improve your prospects having green credentials can help to develop new markets for your products
- improve your reputation among staff, customers and the public
- qualify for business support and loan schemes when buying energy-saving equipment such as interest-free energy efficiency loans

Buy products with environmental labels.

An environmental label shows that a product or service is produced with less impact on the environment. Environmental or green labels can help you make informed choices about the products or services you buy.

You should check the claims made by an environmental label before you buy a product or service.

Buy products or services which use a label with appropriate environmental standards and which is awarded by an independent body, for example from an ISO Type I labelling scheme.

If you are sourcing materials for the brewing process you could consider using bakery waste, or unsold bread products from local supermarkets. There are example of beers which include a proportion of bread in the production process.

See Reference 2 Environmental and Eco Labels



3. Water use and efficiency

A source of clean, good quality water is essential for the production processes of brewing or distilling.

Water for cooling purposes will not have to have the same high quality.

You will either have a supply of water through the mains from a water company, or you will abstract water from an inland watercourse or borehole as a private water supply. In either case you may, depending on the characteristics of the water supply, need to further treat the water to make it suitable for your production process.



If water is to be incorporated into the final product it must be wholesome.



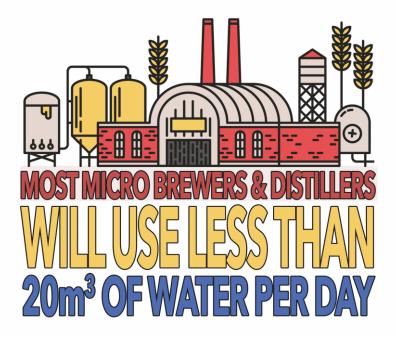
If you intend to use water from inland surface waters, such as rivers or streams, reservoirs, lakes, lochs/loughs, ponds, springs, or from a borehole or other underground source, you will need authorisation from your environmental regulator.

Water abstraction



If you abstract water for use in a commercial premises, regardless of the volume of water abstracted, you must register the use of the private supply with The Drinking Water Inspectorate (Northern Ireland) or your local council environmental health department in Scotland, Wales and England.

Authorisation for water abstraction can be a simple notification when the quantity abstracted is small, or a licence for larger quantities. Most craft/micro breweries or distilleries will use less than 20 cubic metres (m³) (4,000 gallons) of water a day.



Apply for an abstraction authorisation

Northern Ireland



Abstracting less than 10 cubic metres (m³) of water a day (m³/d) with minimal risk to the environment is called a permitted controlled activity (PCA). You don't need to contact the NIEA, but you must:

- be able to demonstrate the volume of water you abstract
- minimise water leaks
- prevent any contamination or pollution.

If you take between 10 m³/d and 20 m³/d a day, you must notify the NIEA and comply with PCA conditions.

If you abstract more than 20 m³/d you need an abstraction licence from the NIEA.

Scotland



If you abstract less than 10 cubic metres (m³) of water a day (m³/d) you must comply with General Binding Rules (GBRs). You do not need to contact the Scottish Environment Protection Agency (SEPA), but you must comply with the rules specific to your activity.

If you want to abstract between 10 m³/d and 50 m³/d per day from inland surface waters, or groundwater you must register with SEPA.

If you abstract more than 50 m³/d per day then you will need a licence.

Wales



If you abstract more than 20 cubic metres (m³) per day (m³/d) you need an abstraction licence from Natural Resources Wales (NRW).

In Wales, from 1 January 2018 most abstraction and impoundment licensing exemptions were removed. You are now likely to need an abstraction licence if you are already abstracting or wish to start abstracting (more than 20 m³/d) from groundwater in an area that was previously exempt e.g. North and West Wales.

Some low risk abstraction exemptions still apply, including if abstracting less than 20³ per day.

See Reference 5 Water abstraction licences

Water Quality



If you intend using water from a private supply, that is any source that is not provided by the water undertaker, for purposes which require a wholesome supply of water (i.e. where the water is a constituent of the end product), you must register the supply with the local council (England and Scotland) or the Drinking Water Inspectorate (Northern Ireland). Specific requirements must be met with regard to the water quality, monitoring and risk assessment requirements. Depending on the quality of the raw water from your private supply, specific treatment may be required to enable you to use it in your business.

Where treatment of the water supply is installed to make the water wholesome or to optimise production conditions, care should be taken to ensure it is maintained in accordance with the manufacturer's instructions so as to ensure the ongoing quality of the water.

Activated carbon filters can be used to remove chlorine compounds from mains water, or remove chemical elements, and discolouration, from abstracted water used in the production process. See the Waste section for ways of disposing of used carbon filters.

See Reference 10 Water quality and safety

Discharges of cooling water

If you use a cooling system to reduce the temperature of the wort before adding yeast for fermentation you may produce quantities of hot water. This could come from a mains supply, or you might abstract it from surface waters or groundwater.

The most energy efficient, and cost effective, method is to install a heat exchanger that uses the cooling water to heat the following batch of water used in your production process.

This will still leave you with relatively hot water and it is important that you know what you can and can't do with it.

Allow it to cool completely before discharge

If you have the storage capacity you can allow the water to cool down completely before discharging it. This may not be possible if you have a continuous production process.

Discharge to a public sewer



If you discharge cooling water to a public sewer you must have a discharge consent or a discharge agreement from your sewerage provider. This will contain conditions, including the maximum temperature of the discharge. You may need to cool the water before discharging to the sewer.

Discharge to rivers or other surface waters

If you intend to discharge cooling water into surface waters you will need to make sure that it doesn't cause environmental harm. Raising the temperature of a river, stream or burn could have a negative effect on wildlife, including fish populations.

You may have to install a cooling tank, or cooling ponds that reduce the temperature of the water before it is discharged.

Your environmental regulator will be able to advise you about the temperature that must be achieved.

Minimise water use - choose water efficient equipment



If you discharge to rivers or other surface waters, you must apply for:

- In Northern Ireland a discharge consent from the NIEA.
- In Scotland, you will need a Registration from SEPA.

In Wales apply for a Standard Rules Permit from NRW.

The Enhanced Capital Allowance (ECA) scheme enables you to deduct the whole cost of your investment in water-saving technologies and products from your profits in the tax year that you make the purchase. The scheme is available to businesses that pay UK corporation tax or income tax, and that have enough profits for the allowance to be written off against.

You can claim the allowance when you buy any of the products that appear on the water technology list (WTL). The WTL includes water efficient products including:

- efficient taps ie automatic shut-off taps, electronic taps, low-flow screwdown/lever taps and spray taps
- flow controllers ie control and flow-limiting devices
- leakage detection equipment ie data loggers, pressure-reducing valve controllers, and remote meter-reading and leak-warning devices
- meters and monitoring equipment ie flow meters and water management software
- rainwater harvesting equipment ie monitoring and control equipment, rainwater filtration equipment and rainwater storage vessels
- small-scale slurry and sludge dewatering equipment ie belt press, centrifuge and filter press equipment

WRAPNI (Waste & Resources Action Programme) provides structured information and support to businesses to help them achieve water efficiency savings in Northern Ireland.

Resource Efficient Scotland provides structured information and support to businesses to help them achieve water efficiency savings in Scotland.

Waterwise has information on how to develop a water efficiency plan and Welsh Water has information on how to carry out a water efficiency survey of your activities.

See Reference 6: Water efficiency

4. Waste

Solid wastes, exempt wastes and liquid wastes

Duty of Care



As a business, you have a legal responsibility to ensure that you produce, store, transport and dispose of your business waste without harming the environment. This is called your duty of care.

You must:

- segregate, store and transport your waste appropriately and securely, making sure that you do not cause any pollution or harm to human health
- check that your waste is transported and handled by people or businesses that are authorised to do so
- complete waste transfer notes, including a full, accurate description of the waste, to document all waste you transfer, and keep them as a record for at least two years.

Follow the waste hierarchy



PREVENT If you cant't prevent, then... PREPARE FOR RE-USE If you cant't prepare for re-use, then... RECYCLE if you can't recycle, then...

RECOVER OTHER VALUE If you can't recover value, then...

If you can t recover value, then...

DISPOSE

Landfill if no alternative available



Most preferable

Least preferable option

If you have a **regular collection** of the same type of waste from your business, collected by the same contractor, then you can use a 'season ticket' which will last for a year. This means that you don't need a waste transfer note every time your waste is collected.



In Northern Ireland and Scotland you have a duty to segregate key recyclates for separate collection. The materials are:



Micro-breweries and Micro-distilleries will also produce organic materials/by-products such as draff, yeast sediment, pot ale and spent hops.

Having wastes collected by a waste contractor.

All wastes can be disposed off-site, using a registered waste carrier and taking it to a site that is licenced to accept it. Most waste companies will be able to take organic materials to composting sites or anaerobic digestion plants. None of the materials in Tables 1 and 2 below need to be landfilled.

Disposal to landfill will cost you money, many of the options below are low cost. Farmers may even pay for certain materials that can replace or supplement commercial animal feed or fertiliser. You may need to transport materials if you are supplying a farm, so having local contacts would reduce your costs even further.

Options for managing by-products and waste

Note for users in Wales: This section on managing waste and the by-products of brewing and distilling has not yet been reviewed for Wales. In the meantime you should contact Natural Resources Wales (NRW) for information about the options for use and disposal of these materials. We are committed to reviewing the following content for Wales and will do so at the earliest opportunity.

Use as Animal feed

Spent grains and malt, yeast and pot ale are commonly used as animal feeds. Cattle, sheep, pigs and poultry can benefit from this type of feed. Pot ale from copper distilling equipment should not be fed to sheep as they are sensitive to copper.

Usually these feeds are mixed with silage or other animal feeds.

Landspreading

Waste exemptions

You can register an exemption for the landspreading of pot ale, spent lees, spent hops and trub. This means that as long as you comply with the terms of the exemption you will not need a permit or licence. These waste management activities are considered to pose a low risk of harm to the environment and to human health.

Applying waste materials to land for agricultural benefit can be carried out:

- In Northern Ireland under a Paragraph 9 exemption
- In Scotland under a Paragraph 7 exemption



If you use a waste exemption there are conditions that must be met.

For a paragraph 9 (Northern Ireland) or Paragraph 7 (Scotland) where waste is to be spread for agricultural benefit, the quantity applied must be correct for the needs of the crop. Soil analysis is needed to show the need for the fertiliser and an analysis of the fertiliser provided to show that it meets these needs.

You will need to register an exemption with the NIEA, SEPA. You should speak to your environmental regulator before you carry out any waste management activities.



Composting

It is possible to compost waste from fermentation processes to produce compost that will be applied to land. This could apply to draff, spent grains, yeast, used kieselgur from beer filters, spent hops and the dust, small grains and culms from malting.

- In **Scotland** you must apply for a Waste Management Licence to compost these waste materials
- In **Northern Ireland** you must apply for a Waste Management Licence to compost these waste materials.

Burning for heat/power



Burning of waste to generate heat or power will require:

- In Scotland: A Paragraph 5 Exemption for burning biomass waste in appliances with a throughput of less than 50kg/hour. Biomass materials from distilleries and breweries are not waste when used for either animal feed or combusted for energy. Non- biomass wastes cannot be burned under this exemption.
- In Northern Ireland: a Paragraph 7 exemption for appliances with a net thermal input of less than 0.4 Mw
- In Wales: U4 Exemption for appliances that burn less than 50kg/hour may be used, depending on the nature of the material. There are certain waste codes to which this will apply. You should contact the regulator to discuss. Other burning activities will require an Environmental Permit.
- Plants with a net rated thermal input >1MW will require a permit. See reference 12 for more information.

Discharge to sewer



If you want to discharge liquid waste to the public sewer you must have a Trade Effluent Consent from the sewer provider.



All discharges of liquid wastes to the water environment will require authorisation from your environmental regulator.

There may be conditions that must be met before this is permitted, such as the volume, temperature or concentration of the liquid. You could be required to pre-treat the liquid wastes before discharging to the sewer.

Discharge to water after treatment

You may need to put in your own effluent treatment system before permission is granted. This could be a septic tank or a package treatment plant or a constructed reed bed. You must have the approval of the regulator and the system must be able to adequately deal with the quantity and strength of the discharge.

Anaerobic digestion

Materials from distilling and brewing such as draff, spent grain, pot ale, spent lees can be used in an anaerobic digestion plant to generate biogas and materials suitable for soil improvement. This can be carried out under

• in **Scotland:** no waste controls will apply where there are tight quality controls and specifications in place. Otherwise a paragraph 51 exemption will apply for AD plants that have a capacity to process 100 tonnes of distillery/brewery waste or less per day. Larger plants require a PPC permit.

- in Northern Ireland, a Waste Management Licence, for AD plants that have a capacity to process 100 tonnes or less per day. Larger plants require a PPC permit
- in **Wales** A range of permitting options exist for Anaerobic Digestion activities. You should contact the regulator to discuss which is appropriate.

Material	Possible routes	Authorisations/consents	
DRAFF (spent grain, malt, potato)	Animal feed for farms (can be combined with pot ale syrup to make dark grains)	Sold as a by-product. No waste controls	
	Composting	NI Apply for a Waste Management Licence	
		Scotland Apply for a Waste Management Licence	
	Drying and burning to generate heat/steam for processes	in Scotland not classed as a waste activity In Northern Ireland : a Paragraph 7 exemption	
Pot Ale (liquid	Animal feed (Can be	Sold as a by-product. No waste controls	
residue from distilling	evaporated to make pot ale syrup for animal feed)	Sold as a by-product. No waste controls	
process)	Landspreading for agricultural benefit	Landspreading: requires a waste exemption in Northern Ireland and Scotland	
	Discharged to foul sewer	Trade effluent agreement with water and sewerage provider	
	Discharged to water after treatment	Authorisation from your environmental regulator	
	AD plant to generate gas	Northern Ireland: Waste management licence or PPC permit	
		Scotland : No waste controls where quality criteria are met. Otherwise a Paragraph 51 Exemption	
Spent lees (residue from	Treatment to remove water – sludge can be landspread	Landspreading: requires a waste exemption	
second distilling – more dilute	Discharged to foul sewer	Trade effluent agreement with water and sewerage provider	
than pot ale)	AD plant to generate gas	Northern Ireland: Waste management licence or PPC permit	
		Scotland : No waste controls where quality criteria are met. Otherwise a Paragraph 51 Exemption	
Used carbon	To land – soil improver	Requires a waste exemption in Scotland	
from filters	Composted	NI: Waste management licence or PPC permit	
		Scotland: Waste management licence or PPC permit	

Table 1: Summary of Distillery residues

Material	Possible routes	Authorisations/consents	
Malting by-	Animal feed	Sold as a by-product. No waste controls	
products dust, small grains, culms	Compost	NI: Waste management licence (WML) or PPC permit	
Cullins		Scotland : Waste management licence (WML) or PPC permit	
Spent grains	Animal feed (cattle, sheep , pigs etc)	Sold as a by-product. No waste controls	
	Compost	NI Waste management licence or PPC permit	
		Scotland: Waste management licence or PPC permit	
Spent yeast	Reuse		
	Add to spent grains for animal feed	Sold as a by-product. No waste controls	
	composted	NI Waste management licence or PPC permit	
		Scotland: Waste management licence or PPC permit	
Spent hops	Landspreading/soil conditioner (composted or not)	Landspreading: requires a waste exemption, or may require an Environmental permit in Wales	
	Animal feed – added to spent grains	Northern Ireland and Scotland: Sold as a by- product. No waste controls	
Trub (solids from the liquid wort)	Dewatered for animal feed, added to spent grain	Northern Ireland and Scotland: No waste controls	
	Landspreading/ soil conditioner	Northern Ireland and Scotland : Landspreading: requires a waste exemption.	
Used kieselguhr	Added to compost, soil additive (repels slugs etc)	NI Waste management licence or PPC permit	
(diatomous earth) filter material		Scotland Waste management licence or PPC permit	
Used carbon	To land – soil improver	Requires a waste exemption	
from filters	Composted	NI: Waste management licence or PPC permit	
		Scotland: Waste management licence or PPC permit	

Hazardous waste (Special waste in Scotland)

Waste is considered to be hazardous when it might be harmful to human health or the environment. Examples of waste with hazardous properties include



If your business produces waste with hazardous properties you must comply with legal obligations that control how you store, transport, treat and dispose of it.

Storing hazardous/special waste

If you produce small quantities of hazardous waste occasionally you can store them on your site for up to 12 months and have them collected all at once. There are limits to how much you can store: 23,000 litres of liquid waste in secure containers, or for solid waste; 80m3 in secure containers or 50m3 stored in a secure place.

You will not need a permit or authorisation from your environmental regulator to store less than these amounts.



If you keep hazardous/special waste on your premises, even for a short period of time, you must:

- ensure that it is stored safely and securely to prevent pollution
- ensure that it is packaged and labelled correctly
- keep the different types of hazardous/special waste separate
- keep hazardous /special and non-hazardous waste separate
- keep liquid hazardous/special waste in a dedicated area with a bund or barrier
- regularly check storage areas for leaks, deteriorating containers or other potential risks
- display written instructions for storing and disposing of each type of hazardous waste
- maintain an inventory of the hazardous/special wastes kept on your premises, and where they are stored - this will help the emergency services to deal with any incident effectively and safely.

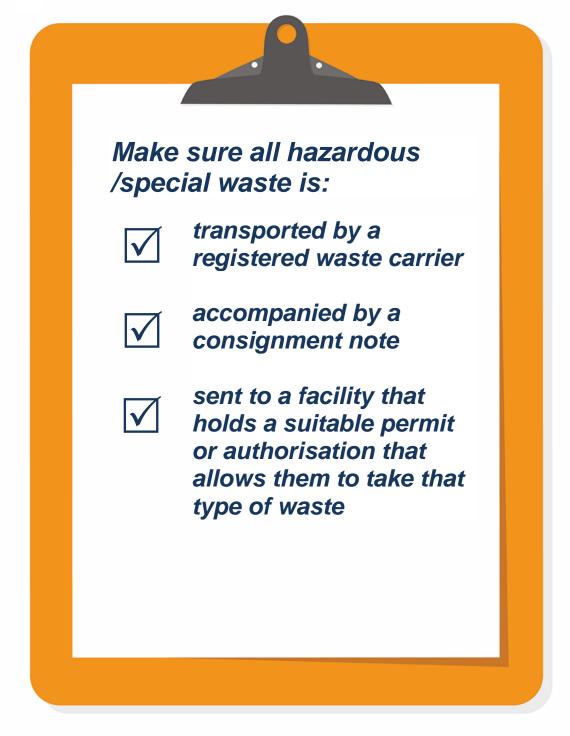
In Wales if you produce or store more than 500kg of hazardous waste per year you must register with NRW each year.

Moving hazardous/special waste



When moving hazardous waste you must ensure that the waste is:

- transported by a registered waste carrier
- accompanied by a consignment note
- sent to a facility that holds a suitable permit or authorisation that allows them to accept that type of waste



See Reference 7 Duty of Care for waste

Energy use

Check if you need to comply with ESOS

The Energy Saving Opportunities Scheme (ESOS) applies to your business if you employ more than 250 employees and have a turnover greater than 50 million Euros or have a balance sheet greater than 43 million Euros. Small scale brewers and distillers are unlikely to have any requirement under this scheme. However if your business grows significantly, and your production does increase, you may eventually have to comply.

Reduce your energy use

Reduce your energy use and use energy more efficiently. This is the best way to reduce your carbon emissions. You can get help from business support organisations to assess the viability of these systems for your own circumstances. You may also qualify for grants and loans to help install these systems.

Purchase energy efficient equipment

You could purchase machinery and equipment that has the best possible energy rating, and design your processes to reduce energy use. For example cooling water from a condenser could be recycled to heat the next batch of your products. The use of heat exchangers will reduce your costs and can have a short payback period.

You can use the Enhanced Capital Allowance scheme to reduce the costs of installing energy saving technologies.

Grants and loans could also be available.

Buy or generate green energy

You could buy your electricity from a supplier that supplies 100 % renewable energy.



You can generate energy from renewable sources such as wind, solar and hydroelectric power. You may need to speak to your planning authority or your environmental regulator for certain systems. Once installed, these provide a secure energy supply at a known cost. Grants and loans may be available for you to install such systems. Surplus energy can be sold back to the grid reducing costs further.

The Scotch Whisky Association has developed a renewable energy tool to aid decision making.

See Reference 3: Support for energy efficiency.

5. Transport

Transport can be a significant part of your business's impact on the environment. You can reduce these impacts by planning the way your business makes and receives deliveries.

Reduce the number of deliveries.

Try to avoid repeated deliveries of small amounts of goods. Materials needed for your brewing or distilling could be cheaper if purchased in bulk. If you have the ability to store materials securely then this will reduce the need for frequent and possibly costly deliveries of small amounts.

Try to minimise the number of deliveries of products you make to customers. Encourage them to take larger deliveries - this will save your business money and could make the product cheaper for your customers.

Plan routes for deliveries to minimise the distance covered, there is software you can use to optimise delivery routes and save on fuel costs.

Use fuel efficient vehicles

When buying new company vehicles, select models with **low carbon dioxide** (CO₂) emissions and high **fuel efficiency**. Consider hybrids or, if you have refuelling stations nearby, vehicles that run on Liquid Propane Gas (LPG).

You can find out the fuel efficiency a vehicle from the Vehicle Certification Agency (VCA) or Society of Motor Manufacturers and Traders Ltd (SMMT). Low emission vehicles save money on fuel and on vehicle road tax.

Consider electric vehicles

If you make deliveries in your local area on a regular basis then you could use electric vehicles. This might be more suitable for urban areas where there are a lot of deliveries in a relatively small area. These reduce running costs, not just by reducing fuel costs but in reduced wear and tear due to fewer moving parts and less wear on brakes.



Train delivery drivers

Improve the driving skills of your staff and help them to develop more efficient driving techniques. You can book fuel efficient driver training through the Energy Saving Trust.

See Reference 9 Transport efficiency

6. Packaging

Minimise packaging



You must comply with packaging regulations if your business manufactures, fills, supplies or handles packaging or packaging materials.

How you design, use and dispose of packaging can affect both your income and the environment. Although the amount of used packaging being recycled is increasing, businesses can do more to use less packaging, lower costs and reduce waste.

This helps to minimise the amount of packaging waste that you, and other parts of your supply chain, have to dispose of.

Packaging design



If you buy packaging for your products you should aim to:

- Minimise the volume and weight, without making it unsafe or unhygienic.
- Check that It can be disposed of finally with minimum impact on the environment
- Use packaging that has been designed to be reused or recovered
- Make sure if packaging is to be recycled that it is easy to recycle

You can ask your supplier to show how the packaging complies with the European Standards for packaging. See **Reference 1 Standards for Packaging**

Use recycled materials

When designing the packaging for your products you should investigate whether it is possible to make them from, or include, recycled materials without reducing the quality of the product. For example it is possible to specify a percentage of recycled glass in bottles. This reduces the cost and environmental impact of manufacture.

Choose reusable containers

For customers who receive regular deliveries of your products you could introduce returnable bottles, casks or kegs. Empties can be recovered when new deliveries are made. This would be particularly useful when dealing with hotels, pubs, restaurants and clubs.

This would:

- Reduce costs of manufacturing new packaging
- Reduce waste disposal costs for customers
- Reduce transport costs and impacts
- Develop a good relationship with customers

7. Nuisance

What is a nuisance?

Common law nuisance

If the nuisance is affecting a public space or a large number of people, you may be causing a public nuisance. You may have to pay compensation or damages. Your local council may also take action against you to restrict your activities or prosecute you.

Statutory nuisance

Nuisances caused by certain conditions set out in legislation are called statutory nuisances. A statutory nuisance can be caused by:

- noise and vibration
- smoke, fumes or gases
- dust
- steam
- odours
- waste deposits, for example with the risk of vermin
- poor state of premises
- insects coming from your business premises
- artificial lighting.

If you have neighbours, such as housing or business premises, you should make sure that you don't cause a nuisance when carrying out your activities. Take complaints seriously and investigate the cause yourself.

Odours

Brewing and distilling can cause odours; a garage or paint shop next door might not be affected, however a café, restaurant or residents might. Make sure you deal with complaints at an early stage. If there is a problem then you might have to take action. Firstly, and most cost effectively, to try and prevent odours being produced at the process level, or if that is not possible by installing filters or other methods to prevent odours escaping.

Waste



If you store waste on your premises before collection, make sure it is segregated correctly and is in secure, covered containers.

This will prevent leaks, wind-blown waste escaping, and reduce problems with vermin. Importantly it will make sure that you don't cause pollution.

Transport

Heavy vehicles arriving at unsocial hours, and reversing alarms on vehicles can cause annoyance. Schedule deliveries and collections at time that won't cause problems for your neighbours.

See Reference 4 Statutory nuisance

8. On Site Pollution Prevention

Oil or fuel storage



If you store any liquid fuels on site, such as petrol, diesel or kerosene you must comply with the Regulations on Oil Storage.

For information on oil storage see Reference 11 Safe storage

Pollution incident response plans

It is good practice to have a pollution incident response plan, so all staff know what to do in the event of a spill or other incident.

The plan should contain:

- A drainage plan
- Spill kits
- Emergency contact numbers including the regulators pollution hotline.
- An inventory of all materials and products stored on the site including location.

Spill kits, containing absorbent materials appropriate for the liquids stored, should be kept close to areas where spills might occur. Make sure your staff know when and how to use them.

See Reference 11 Safe storage

9. References

Reference 1 Standards for packaging design

EUROPEN: Understanding the CEN standards on packaging and the environment (PDF 300KB)

http://www.europen-packaging.eu/downloads/236.html BSI: British Standards for packaging manufacturing https://shop.bsigroup.com/Browse-by-Sector/Manufacturing/Packaging/packaging/

Reference 2 Environmental and Eco Labels

The Global Ecolabelling Network https://www.globalecolabelling.net/ The EU Ecolabel Product Catalogue http://ec.europa.eu/ecat/

Reference 3: Support for energy efficiency.

GOV.UK: Enhanced Capital Allowance scheme – Energy saving technologies https://www.gov.uk/government/publications/enhanced-capital-allowance-scheme-forenergy-saving-technologies Vehicle Certification Agency (VCA): New car fuel consumption and exhaust emissions http://carfueldata.direct.gov.uk/ Carbon Trust: Energy Efficiency Financing https://www.carbontrust.com/client-services/programmes/finance/ Carbon Trust: Green Business Fund https://www.carbontrust.com/resources/faqs/services/loans/ WRAPNI: Sustainable procurement http://www.wrapni.org.uk/content/sustainable-procurement

Resource Efficient Scotland: Guide to sustainable procurement

http://www.resourceefficientscotland.com/sites/default/files/Small%20retailers%20-%20quick%20guide%20to%20procurement%20factsheet%20Resource%20Efficient%20Sco tland.pdf

Resource Efficient Scotland: Funding and support for capital projects <u>http://www.resourceefficientscotland.com/funding</u> Energy Saving Trust Scotland: Grants and Loans http://www.energysavingtrust.org.uk/scotland/grants-loans

Natural Resources Wales: Regulation and support for renewable energy <u>https://naturalresources.wales/guidance-and-advice/environmental-topics/energy/?lang=en</u> Resource Efficient Wales: Saving on energy, water and waste <u>https://www.wcva.org.uk/advice-guidance/advice-guidance-latest/2015/03/resource-efficient-wales</u>

Scotch Whisky Association: Distillers Renewable Energy Tool http://www.scotch-whisky.org.uk/news-publications/publications/documents/distillersrenewable-energy-tool-2014#.Wss37tLru70

Reference 4 Statutory nuisance

Scottish Government: Nuisance <u>http://www.hps.scot.nhs.uk/guidelines/detail.aspx?id=822</u> DAERA NI: Nuisance <u>https://www.daera-ni.gov.uk/publications/guidance-district-councils-statutory-nuisances</u> Welsh Government: Noise and nuisance <u>http://gov.wales/topics/environmentcountryside/epq/noiseandnuisance/?lang=en</u>

Reference 5 Water abstraction

Natural Resources Wales: Changes to water abstraction licensing exemptions <u>https://naturalresources.wales/permits-and-permissions/water-abstraction-and-impoundment/changes-to-water-abstraction-licensing-exemptions/?lang=en</u>

see over...

Natural Resources Wales: Information about water abstraction or impoundment licensing https://naturalresources.wales/permits-and-permissions/water-abstraction-and-impoundment/information-about-water-abstraction-or-impoundment-licensing/?lang=en

NIEA: Apply to abstract water <u>https://www.daera-ni.gov.uk/articles/applying-abstract-or-impound-water</u>

SEPA – Water abstractions https://www.sepa.org.uk/regulations/water/abstractions/#four

Reference 6 Water efficiency

GOV.UK: Enhanced Capital Allowance – Water technology list and criteria <u>https://www.gov.uk/government/publications/water-efficient-enhanced-capital-allowances</u>

Wrap Northern Ireland: Tracking water use to cut costs http://www.wrapni.org.uk/content/tracking-water-use-cut-costs

Resource Efficient Scotland: Implement a water minimisation programme <u>http://www.resourceefficientscotland.com/content/key-task/implement-a-water-minimisation-programme</u>

Welsh Water: Water efficiency survey <u>http://www.dwrcymru.com/en/Business/Water-Efficiency/Water-Efficiency-Survey.aspx</u> Business Wales: develop a water efficiency plan <u>https://businesswales.gov.wales/how-develop-water-efficiency-plan</u>

Waterwise: How to manage change and improve water efficiency. http://www.waterwise.org.uk/resource/how-to-manage-change-and-improve-water-efficiencywrap/

Reference 7 Duty of care for waste

Northern Ireland and Scotland: NetRegs: Duty of care for waste http://www.netregs.org.uk/environmental-topics/waste/duty-of-care-your-waste-responsibilities/

Wales: Waste duty of care code of practice

<u>https://www.gov.uk/government/publications/waste-duty-of-care-code-of-practice</u> Wales: Register as a producer of hazardous waste. <u>https://naturalresources.wales/permits-and-permissions/waste/register-as-a-producer-of-hazardous-waste/?lang=en</u>

Reference 8 Waste Authorisations

Northern Ireland: Paragraph 9 exemption <u>https://www.daera-ni.gov.uk/articles/land-treatment-agricultural-benefit-or-ecological-improvement-paragraph-9-exemption</u>

NI Waste Management Licences: <u>https://www.daera-ni.gov.uk/articles/waste-management-licensing</u>

NI PPC Permits: https://www.daera-ni.gov.uk/articles/ippc-guidance-and-application-forms

Scotland: Paragraph 7 exemption <u>https://www.sepa.org.uk/regulations/waste/activities-exempt-from-waste-management-licensing/</u>

Wales: Environmental permitting: <u>https://naturalresources.wales/permits-and-permissions/environmental-permits/?lang=en</u>

Reference 9 Transport efficiency

Energy Saving Trust: Eco driving and fuel efficient cars http://www.energysavingtrust.org.uk/blog/tips-eco-driving-and-fuel-efficient-cars ROSPA: Driver training – eco-driving https://www.rospa.com/safety-training/on-road/driver-training/develop/eco-driving/ GOV.UK: Fuel data for vans http://vanfueldata.dft.gov.uk/ Energy Saving Trust Scotland: Fuel-good driver training http://www.energysavingtrust.org.uk/scotland/businesses-organisations/transport/fuelgooddriver-training

Reference 10 Water quality and safety

Northern Ireland: Is Your Private Water Supply Safe? <u>https://www.daera-</u> ni.gov.uk/sites/default/files/publications/daera/Is%20your%20private%20water%20supply%2 <u>Osafe.PDF</u> Scotland: Private water supplies <u>https://www.mygov.scot/housing-local-services/water-</u> <u>supplies-sewerage/private-water-supplies/</u> Wales: Private water supplies <u>http://gov.wales/topics/environmentcountryside/epg/waterflooding/privatesupplies/?lang=en</u>

Reference 11 Safe storage

Regulations on Oil Storage Scotland: <u>General Binding Rules 26 and 28 of the Controlled Activities Regulations</u> <u>Oil Storage in Scotland</u> Regulations on Oil Storage Northern Ireland: <u>Control of Pollution (Oil Storage) Regulations (Northern Ireland) 2010</u> Regulations on Oil Storage Wales: <u>The Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016</u> <u>GPP 2 Above ground oil storage <u>http://www.netregs.org.uk/media/1475/gpp-2-pdf-jan-2018.pdf</u> <u>GPP 20 Pollution incident response planning http://www.netregs.org.uk/media/1436/gpp-21-final.pdf</u></u>

Reference 12 Burning biomass

Northern Ireland Environment Agency: Medium Combustion Plant (>1MW) <u>https://www.daera-ni.gov.uk/articles/medium-combustion-plant-directive-and-specified-generators</u>

SEPA: Medium Combustion Plant (>1MW) <u>https://www.sepa.org.uk/regulations/pollution-prevention-and-control/medium-combustion-plant/</u> SEPA: Permitting guidance for biomass combustion <u>https://www.sepa.org.uk/media/155820/ppc_technical_guidance_tg22_biomass_combustion.</u> <u>pdf</u> Natural Resources Wales: Medium Combustion plant (>1MW) https://naturalresources.wales/permits-and-permissions/medium-combustion-plant-andspecified-generator-activities/?lang=en

10. Further Information

For information about environmental compliance, or to report inconsistencies or inaccuracies in this guidance, visit <u>www.netregs.org.uk</u>.

You can view guidance on environmental regulations online at <u>www.netregs.org.uk</u> (for businesses in Scotland and Northern Ireland) and at <u>http://naturalresources.wales</u> (for businesses in Wales).

This guidance is issued by the Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency (NIEA) and Natural Resources Wales (NRW).

This document is available at <u>www.netregs.org.uk/environmental-topics/pollution-prevention-</u> <u>guidelines-ppgs-and-replacement-series/</u>.

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Useful contacts

Incident/Pollution hotline: Northern Ireland, Scotland and England	0800 80 70 60 (24-hour service)
Emergency hotline - Wales	0300 065 3000 (press 1 – 24-hour service)
Floodline – Wales, Scotland and England	0845 988 1188
Flooding incident line - Northern Ireland (<i>Please Note: Flooding is the responsibility of the Department for Infrastructure in Northern Ireland</i>)	0300 200 0100

Natural Resources Wales	Scottish Environment Protection Agency	Northern Ireland Environment Agency
www.naturalresourceswales.gov.uk	www.sepa.org.uk	www.daera-ni.gov.uk
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Tel: 0300 065 3000 (Mon – Fri, 9am– 5pm)	Tel: 03000 99 66 99	Tel: 0300 200 7856
enquiries@naturalresourceswales.gov.uk	www.sepa.org.uk/contact	nieainfo@daera-ni.gov.uk