

Landfills: a fact sheet

A landfill is one of the places where wastes go for final disposal. This factsheet tells you about landfills and the role the Environment Agency plays in ensuring they operate safely.

1. What is a landfill?

A landfill site is an area of land used to dispose of rubbish, either directly on the ground or by filling a hole in the ground. For example, a disused quarry is often used as a landfill. Local authorities and industry take wastes to landfills.

There are three kinds of operational landfill sites, categorised by the types of waste they are authorised to take. These are:

a) **Inert wastes.** These sites take only inert wastes such as excavation wastes. They have a low impact on the environment. Inert wastes are unlikely to react with other wastes.

b) **Non-hazardous wastes.** These sites take a mix of inert waste and biodegradable wastes. They may also be allowed to make special provision for some hazardous waste such as asbestos.

c) **Hazardous wastes.** These sites take hazardous wastes such as contaminated soils and asbestos.

2. What happens in a landfill?

Most non-hazardous wastes gradually degrade in a landfill. As they do so they produce gas, which is known simply as landfill gas. As rainwater seeps through the landfill a liquid is formed, known as leachate. Landfill gas and leachate must be safely extracted and treated.

3. Why do we need landfills?

Around 300 million tonnes of waste are produced each year in England and Wales all of which needs managing in a way that protects people and the environment.

Although some of this waste is reused or recycled – and the percentage is rising all the time – some of it still needs to be disposed of. As well as reuse and recycling there are other techniques and technologies being developed to reduce the amount of rubbish sent to landfill each year. These include producing energy from waste by incineration or by anaerobic digestion.

4. Are landfills safe?

Yes. All landfill sites must operate without causing pollution of the environment or harm to human health. They are carefully managed to keep risks to a minimum.

We understand the potential risks to the environment from landfills. However we are not medical experts and so we take advice and information provided by health professionals in making decisions on the risks to health from landfills we regulate. We ask primary care trusts in England and local health boards in Wales to consistently fulfill their role as statutory consultees by providing their expert opinions on applications to operate a landfill. This is in line with guidance provided by the Health Protection Agency. If you have concerns over the impact of landfills on your health you should contact your GP (General Practitioner), your local primary care trust or your local health board.

5. What legislation controls landfill activity?

Anyone who operates a landfill site must have an environmental permit to do so. Landfill operators must now comply with the European Directive on the Landfill of Waste, the Environmental Permitting Regulations (England and Wales 2010) and some additional directives. Other regulations apply in Scotland and Northern Ireland.

Regulations set standards for the location, design, monitoring and operation of landfills.

When it is time to close the site the operator has to agree with us how they are going to do this and agree a plan for its monitoring and management. This is known as aftercare. The aftercare will continue until we are satisfied that there is no risk to the environment. Aftercare can last 100 years or more.

6. What does the Environment Agency do?

It's our job to regulate landfill sites and make sure their impact on the environment is minimal.

When a landfill site is proposed, the local planning authority consults us on a planning application. We make sure any new landfill is in an area which has the least impact on the environment. We check the proposal against our groundwater protection policy, among other things. The landfill operator must apply to us for his environmental permit to open and operate the landfill. We check that the operator has assessed the risks and whether he can manage them. We consult other bodies on the application, and advertise it to the public on our website. We decide whether to permit or refuse the application. We will refuse if it does not meet with environmental, technical or legal requirements.

It is the operator's responsibility to manage the site. When a site is up and running we inspect it regularly to make sure it is operating within the conditions of the permit.

We make sure that the operator only takes appropriate waste, that water nearby is not polluted and that nuisance such as odours, waste blowing across the site, noise, and vermin such as gulls do not affect communities in the area. If the operator does not comply with the conditions of the permit we advise on necessary improvements, or we may enforce the permit by issuing a warning, serving a notice taking away permission or by prosecuting the operator.

7. What other organisations are involved?

The local authority decides through the planning process whether to allow the development of a landfill site. It checks the need for the site against waste plans, and sets conditions on size, location and restoration. We cannot grant a permit unless the site has planning permission. Public health experts, primary care trusts in England and local health boards in Wales advise on the potential impact of exposure on health.

We carry out a consultation. We advertise the permit application in local newspapers and on our website, and we ask the local community, council and public health organisations for their views. Which other organisations we consult with depends on the details of the individual application such as its location but could include, for example, sewerage boards and water companies, harbour and fisheries authorities, Natural England, the Food Standards Agency and Health and Safety Executive. Consultations usually last 28 days.

8. How can I get involved when a new site is proposed?

You can express your views at planning and permit consultations. We recommend the landfill operators organise regular site liaison events. Here you will get to hear how the phases of development may affect you, and the steps being taken to prevent pollution or harm. You can contact the operator directly for information.

9. How do I complain about nuisance from a working landfill?

You should contact the operator directly to complain. We check to see how complaints are being handled and whether a satisfactory response is being made to comply with the permit.

10. How do I find out more about a landfill local to me (working or closed)?

We keep information on landfill sites on our public register. You can see the application, consultation responses, the permit, monitoring records and compliance reports. We hold the register at your local Environment Agency office. Your local authority holds the same public register details as we do.

We became responsible for permitting landfill operations in 1974. Since then all landfills have required a licence and since 1994 are required to formally apply to us to surrender their permit. We retain all records for these sites, electronically or in paper archives.

Your local authority may hold site files for landfills which ceased to operate before 1974, although this isn't guaranteed.

To find your nearest Environment Agency office call our national customer contact centre on 08708 506 506 (Mon-Fri, 8am-6pm) or see our website at www.environment-agency.gov.uk/contactus. Your local office will be able to advise you on how to view our records.

You can find your local authority's number in your local telephone directory.

What else can I do?

Reduce, reuse and recycle or compost as much of your household rubbish as possible. Ask your local council about recycling facilities in your area. There is also more information on dealing with waste on our website as detailed below.

Other information

You can find lots of information on our website or by searching on the internet.

For example on the Environment Agency site you can see general information on waste and landfills on our 'home and leisure' and 'business and industry' sections. Our web site is www.environment-agency.gov.uk.

You can see maps of landfills near your home by following the links to "What's in my back yard".

Or you can call us on 08708 506 506* 8am-6pm, Monday-Friday

Email us at enquiries@environmentagency.gov.uk

*Weekday daytime calls to 0870 numbers cost 8p, plus up to 6p per minute from BT Weekend Unlimited. Mobile and other providers' charges may vary. If you are hard of hearing, please call our minicom service on 08702 422 549.