

Facts about fracking

Environmental controls in England

In England, there is national regulation to control fracking that is enforced by local independent regulators.



Environment Agency



Oil & Gas Authority



HSE Health & Safety Executive



Public Health England

Mineral Planning Authority

This industry is an extension of an established, existing onshore oil and gas industry that the Environment Agency has regulated for many years. We understand the environmental risks and have the right regulatory controls in place. We have learnt many lessons from around the world and as a result there are a number of practices that are not allowed in England:

Fracking cannot take place near the surface

Shale rock is found at different depths across the world. Different regulations also means some countries have allowed fracking to take place at depths of only a few hundred metres below the surface. In England high volume fracking can only happen [below depths of at least 1000m](#).

1000m is more than 6 Blackpool Towers stacked on top of each other. Most fracking will take place even deeper than this.



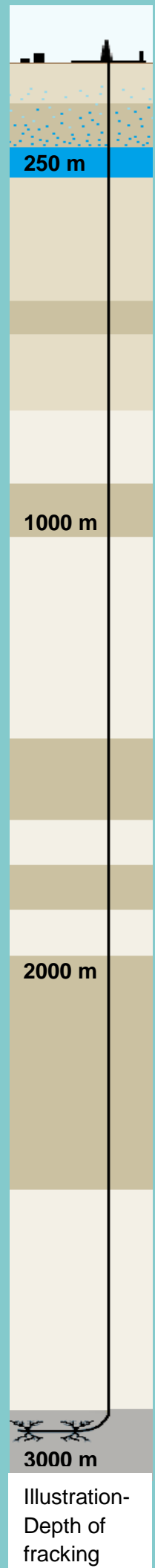
Fracking cannot take place near drinking water

The Environment Agency will not permit drilling or fracking in areas known as [Source Protection Zone 1 \(SPZ1\)](#). These zones are designated to protect groundwater drinking water supplies. For more information read our [Protecting water factsheet](#).

Companies must undertake baseline monitoring

Methane levels in groundwater and air must be monitored before, during and after fracking. This is required by law. This means operators and regulators will be able to spot any increases in methane, assess the cause and stop operations if needed.

The British Geological Survey has been conducting additional [baseline monitoring of methane in groundwater](#) since 2014.



Environment Agency

Companies cannot withhold details of the chemicals they use

Companies are required by law to publically declare the chemicals they propose to use, as well as the maximum concentrations.

Only chemicals assessed by the Environment Agency as non-hazardous to groundwater can be used in fracking fluid. The approved chemicals will be listed in the company's environmental permit and documents which are available on the Environment Agency's public register.

Waste water cannot be stored in unlined pits or open lagoons

In some countries the waste fluid that flows back up the well to the surface has been stored in open, sunken pits, from which it can leak into surrounding soil, surface water and groundwater.

In England the storage of waste waters in unlined pits is not allowed. All waste waters must be stored in sealed tanks within a retaining wall (known as a bunded area) to prevent surface and ground water contamination.



Illustration- chemicals stored in a bunded area to contain any spills

Fracking waste waters cannot be injected into the ground for disposal

If the waste water that comes back up the well after fracking (known as flowback fluid) cannot be reused then it must be managed as a waste.

The flowback fluid from fracking [cannot be re-injected](#) into the ground for disposal. It must be treated to remove contaminants at a permitted waste treatment facility, also regulated by the Environment Agency.

Venting of gas from fracking waste waters is not allowed

Waste waters from fracking must be stored in sealed containers to prevent any remaining gas escaping.



Photo- open flare

Open flares are not allowed

Fracking companies will want to collect and sell all the gas they extract. Flaring to dispose of gas will only happen during exploration, for a short amount of time, or for safety reasons.

The Environment Agency require flares to be [enclosed](#), so that the methane is burnt efficiently and not released to the air, and to reduce noise and light pollution.

At the production stage companies are required to capture and use waste gas for energy generation. For more information see our 'Managing wastes from fracking' factsheet.