



# Some problems associated with Fracking

## 1. Problems associated with leaks or spills

- **Spillages from drilling pads** due to defective berms, accidents, machine breakdown or fault.  
Type of contamination: fracking fluid, chemicals, wastewater, petroleum.
- **Spillages due to vehicle accidents.** Each drilling pad requires 1,000 vehicle journeys. A 1,000-well project (typical) requires 1 million journeys. Vehicles overturn, loads spill.  
Type of contamination: chemicals, wastewater, petroleum, silica sand.
- **Leakages of vehicle oil, diesel or brake-pad liquid.** 1,000 wells require 1 million vehicle journeys. This will result in a lot of leakage of petroleum products that run off into nearby streams or rivers. Ancillary equipment used for a shale gas project (compressors, gaspipes, refineries etc.) also pose a risk for leakages.  
Type of contamination: petroleum products.

## 2. Problems associated with change of use of land

- Large tracts of land become an industrial zone. Former habitats degraded.
- Concrete drilling pads (7 acre) every square mile with access roads.
- Run-off from roads into nearby rivers and streams.
- Profound disturbance of habitat and wildlife.
- Noise and lights from production pads.

## 3. Problems associated with water use

- Each frack takes millions of gallons of water. Problems of water abstraction – this volume of water is needed all at once, not over a season (as on a golf-course). The source of water can be nearby rivers or aquifers.
- The water used is taken out of the hydrologic cycle – it can never return to the local environment. If an aquifer is used as a source of water for fracking, the volume of water in the aquifer can be seriously affected (e.g. Texas). Competition between farming and fracking.

## 4. Problems associated with waste

- **Drilling waste.** “Mud” with drilling additives, petroleum products, heavy metals and radioactive chemicals from underground. If not disposed of carefully, will run-off into waterways.

- **Wastewater.** Between 20 and 80% of water used during fracking comes back up as waste, millions of gallons per well. It is expelled when the pressure on the well is released, flows into ponds, then pumped into tanks. Ponds and tanks can leak.
- **Wastewater contains fracking chemicals** as well as salts, petroleum products (BTEX), heavy metals and radioactive substances from underground. Some may be recycled. The rest has no satisfactory treatment path. In US, most is pumped into large injection wells (this procedure is linked with earthquakes in Oklahoma). This is not a preferred option in Europe. The sludge that remains after recycling is highly toxic to waterways.
- **1 in 1,000 wells experience well failure.** Commonly known as “blow-outs”, they occur when the drilling equipment fails and there is uncontrolled release of gas and fluids. A blow-out can cause serious contamination of land and water. The incidence of underground failures is much higher but unquantified. These pose a risk to aquifers.

## 5. Impact on Fracking on Tourism

- **Angling Tourism in Ireland is currently contributing €750 million annually to the Irish economy.** Any industry affecting water sources will impact on Angling. The areas targeting for Fracking on the Island of Ireland include the Shannon and Erne basins and Lough Neagh. The River Shannon is a wild mixed fishery supporting many fish species including some endangered such as the lamper eel, the European brown eel and the Salmon. The impacts of Fracking have the potential to tip the scales and wipe out these species.
- **Target areas for Fracking** include World Heritage Sites, Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and other important nature and heritage areas that are tourism attractions in their own right. These include Giant’s Causeway and Glens of Antrim, Marble Arch Caves and Geopark; Cavan Burren, North Leitrim Glens, Yeats country, South Clare and North Kerry. These areas are hugely important and are at present major tourism attractions, especially for sight-seeing and for the activities of fishing, cycling, horse riding and walking. Fracking in these areas would endanger fragile ecosystems, destroy ecotourism and reduce numbers of visitors.
- **Wildlife**, flora and fauna on thousands of acres will be degraded due to the nature of the Fracking process such as water abstraction, drilling waste, spillages and vehicle leakages. Thousands of acres of pristine natural beauty will be lost.

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