

# FRACKING FACTS

## Some Facts About Coal Seam Gas

### Hydraulic fracturing

- Hydraulic fracturing (fracking) is a technique used to speed up the flow of coal seam gas (CSG) from underground rock formations.
- Not all wells are fracked - but some may be fracked multiple times.
- If the fractures intercept existing fissures or faults, fracking fluids or gas can move into other geologic layers, risking contamination of groundwater supplies.
- The chemicals in fracking fluids include many that are dangerous.
- An estimated 30% to 70% of the fracking fluid resurfaces, bringing with it toxic substances.

Hydraulic fracturing causes micro-seismic events or little earthquakes that open up pathways for fluids or gases to flow out of underground rock formations where they have been held for millions of years to a gas well or bore.[i]

Typically, a mixture of water, proppants and chemicals is pumped at extremely high pressure into the gas-bearing formation, fracturing the rock. Proppants, usually sand or ceramic beads, hold the cracks open. Radioactive tracer beads may be used to monitor the process.[ii]

With fracking first used in the oil and gas industry in 1948, industry proponents claim that it is a well-tried and tested technique. But fracking methods developed in the last decade are not. They involve higher pressures, take several days and require large volumes of water.

There have been cases in which fracking has split bore casings and sheared through them.[iii]

The CSG industry insists that the chemicals in fracking fluids are found in everyday, household items. **This does not mean they are safe.**

Ingredients include acetic and boric acids, bleach, caustic soda, detergents, polish and hydrocarbon derivatives. [iv] They should not be inhaled, ingested or contact the skin.

Re-surfacing fracking fluid brings up toxic substances naturally present in underground oil and gas deposits. This is pumped into storage dams. Sometimes, nothing is recovered – all the chemicals stay underground.[v]

In the US, there are thousands of documented cases of drinking water supplies being contaminated by fracking fluids and gas,[vi] even though they are separated by tens or even hundreds of metres of rock.

## References

i Hydraulic fracturing 101

<http://www.earthworksaction.org/FracingDetails.cfm>

ii Qld Gas Corporation's Environmental Authority Amendment Application PEN 100020207

iii Tory Shenstone, "Learning to Lead" seminar, Brisbane EKKA, 2009

iv "Chemicals that may be used in

Australian CSG fracing fluid"

[http://www.appea.com.au/images/stories/mb\\_files/APPEA\\_fracing\\_chemicals.pdf](http://www.appea.com.au/images/stories/mb_files/APPEA_fracing_chemicals.pdf)

v The Endocrine Disruptor Exchange

<http://www.endocrinedisruption.com/chemicals.introduction.php>

vi Scientific American, 17 Nov 2008

<http://www.scientificamerican.com/article.cfm?id=drill-for-natural-gas-pollute-water>