

Hydraulic fracturing (fracking): Facts summary

FRACKING – A mixture of water, sand and chemical additives is pumped under pressure down a well to open fissures in gas-bearing rock strata to increase the rate of flow, and total recovery of gas.

BENEFITS - Fracking enables the flow of natural gas, or coal-seam gas, from deeply-buried, underground reservoirs, where the gas is tightly held in the rock. Fracking is done if it improves the economics of resource recovery.

AQUIFERS – Historically, there is evidence of fracking having contaminated aquifers. With good engineering, this can be avoided. Similarly, earthquakes can topple buildings, and buildings can be engineered to avoid that. Global contracting firm Baker Hughes has carried out more than one million fracking operations in the last 60 years. It says not one aquifer has been affected.

<http://www.bakerhughes.com/company/corporate-social-responsibility/sustainable-technology/pumping-services>

CHEMICALS - Fracking uses chemical additives, which are non-toxic in the very low concentrations used, most of which are biodegradable, and most of which are in common household use.

INFO ON CHEMICALS - Information about fracking chemicals is publicly available – example lists are provided on the Straterra web site: <http://www.straterra.co.nz/Fracking%20chemicals>

AIR QUALITY - There are no air quality issues with fracking in New Zealand.

WATER - Water used in fracking will normally require an RMA consent, as is the case for any business using significant quantities of water.

WASTE WATER - Waste water is managed under RMA consents, as is the case for any business that manages waste water, and can include recycling of water.

EARTHQUAKES - Fracking can cause low levels of seismic activity. If felt at all, vibrations may be likened to that of a passing truck. Fracking cannot be linked to the gigantic forces of nature that cause earthquakes such as have occurred in Christchurch. GNS Science opinion:

<http://gns.cri.nz/Home/News-and-Events/Media-Releases/Commentary-on-fracking>

MISINFORMATION – Concerns about fracking are legitimate, however, are overblown. Fracking is a complex issue, as are many engineering operations, and has been misrepresented or poorly explained in a number of overseas reports.

INDEPENDENT ENDORSEMENT – Taranaki Regional Council wrote a report, peer reviewed by GNS Science, concluding that fracking in New Zealand presents very low risk. Of 43 fracking operations (at 28 wells) carried out in New Zealand between 2000 and 2010, none had any adverse effects.

<http://www.trc.govt.nz/assets/Publications/guidelines-procedures-and-publications/Fresh-water-2/hf2011-w.pdf>

NEW REGULATION – TRC requires a resource consent for pumping fluids underground. Conditions include monitoring of fracking to ensure the well is isolated from the water table (aquifers).

NEXT STEPS – Straterra believes there is enough information in support of fracking to settle the debate. But if an inquiry did occur, we would fully support it.