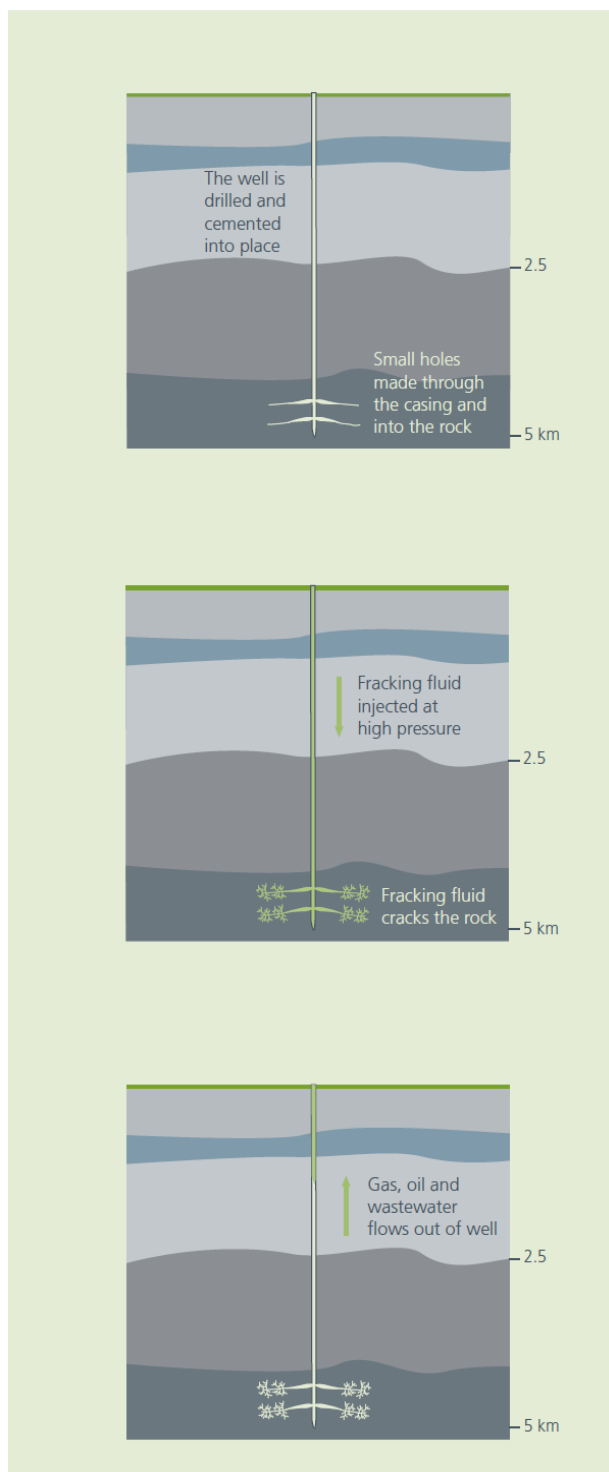


INFORMATION ON FRACKING

Fracking is another name for “hydraulic fracturing”, which describes the process of injecting fluid that contains sand and chemicals at high pressure into rock in order to fracture it. In fracturing the rock previously inaccessible oil and gas that was trapped in the rock, can be released and extracted.

Why is there concern about fracking?

- 1. Chemicals in the fracking fluid.** Mining companies use product names when listing ingredients rather than the actual chemicals that are used in the fracking fluid. This does not give people peace of mind that fracking is safe.
- 2. Volumes of Water used.** The fracking process uses high volumes of water. This can be a concern particularly when many regions may at times be in drought conditions or under water restrictions.
- 3. Contamination of aquifers and soil.** The injection of fracking fluid and wastewater into the ground has the potential to contaminate groundwater. There is concern that not only are fracking chemicals getting into groundwater but heavy metals and radioactive substances from wastewater also contaminate. As well, ‘landfarming’, the spreading of waste on to agricultural land is likely to contaminate food as well as groundwater. The monitoring to detect such pollutants is considered inadequate.
- 4. Earthquakes.** A link has been made between minor earthquakes and fracking overseas. This is of concern in New Zealand because we live in a geologically active country.
- 5. Climate Change.** There is potential for methane (a greenhouse gas) being released into the atmosphere. Also of concern is the continual focus on fossil fuel extraction rather than a focus on renewable energy investment.
- 6. Harm to Papatūānuku.** Harming the *mauri* life force of the earth can endanger the future sources of *kai* food and *wai* water. Fracking may be seen as doing this to Papatūānuku.



Many other concerns relate to our local body councils not having the skill or expertise to monitor fracking operations carried out by mining companies. Local body councils are responsible in ensuring that companies comply with the Resource Management Act.

Information taken and adjusted from ‘Evaluating the environmental impacts of fracking in New Zealand: An interim report, November 2012.’ From the Parliamentary Commissioner for the Environment.

<http://www.pce.parliament.nz/assets/Uploads/Fracking-interim-web.pdf>



Fracking is a contentious issue in many countries, and Sisters of Mercy around the world are joining their voices to many others on **October 19th - Global Frackdown Day**. The Sisters of Mercy have made a commitment to raise and highlight issues of environmental degradation. It is well known that cases of environmental disaster have affected the most vulnerable peoples of the world.

The continual pursuit to find new methods to extract fossil fuels or new areas generally untouched by fossil fuel exploration (e.g. deep water exploration for oil), highlights growing concern. The concern centres on the lack of interest in pursuing fossil fuel alternatives (or investing in research into alternatives) for humanity's growing energy dependence. New frontiers in fossil fuel exploration have already seen an environmental disaster occur with the Gulf of Mexico spill. That disaster affected the livelihood of many people in the area...let alone all the wildlife both in the sea, beaches, marshes and wetlands.

Can we remain indifferent before the problems associated with such realities as climate change, desertification, the deterioration and loss of productivity in vast agricultural areas, the pollution of rivers and aquifers, the loss of biodiversity, the increase of natural catastrophes and deforestation of equatorial and tropical regions? Can we disregard the growing phenomenon of "environmental refugees", people who are forced by the degradation of their natural habitat to forsake it...?

Pope Benedict XVI, World Day of Peace Message, 2010.



What can we ask the NZ Government to do?

- Pressure mine companies to be transparent in listing the actual chemicals used in fracking fluid; allowing list to be open to public scrutiny.
- Place a moratorium on fracking. Provide more financial support to the Parliamentary Commissioner for the Environment to complete her report on fracking monitoring and regulation.
- Place a moratorium on the practice of 'landfarming'. Insufficient research has been carried out in relation to this process and its long-term effect on the environment. For this reason the adoption of the precautionary principle is recommended.
- Ask the Government why they are continually trying to attract mining companies to come here instead of supporting or attracting investment in fossil free technologies that do not harm the environment or help reverse the effects of climate change.