

Advertising Complaint – The Geraldton Guardian, 11 July 2014

DETERMINATION

Facts

On 11 July 2014 the interest group “Frack Free Geraldton”, which is associated with the Conservation Council of Western Australia (CCWA) published the following advertisement in *The Geraldton Guardian* newspaper, one of the publications in the West Australian Newspaper Group:



On 21 July 2014 the following letter from the Chief Operating Officer, Western Region, Australian Petroleum Production and Exploration Association Limited (Appea) was published in the Letters section on page 6 of *The Geraldton Guardian*.

Colours confusing both your wallet and mind

COMMUNITY COMMENT

Local anti-development group Frack Free Geraldton continues to help discredit research in its efforts to frighten people into thinking shale gas poses a risk to groundwater.

A recent advertisement published in the Geraldton Guardian July 11, suggests thousands of gas wells will soon be drilled and that these could leak into groundwater.

It cites Anthony Ingraffia, a US academic who is well known for his anti-gas advocacy and activism, and whose research has drawn significant criticism from US government regulators and other academics.

There is limited shale and tight gas exploration in the Mid West. Perhaps three wells are likely to be drilled this year.

Further investment and activity will depend largely on the results.

This exploration represents a real opportunity for new sources of energy jobs and investment in the region and deserves a well informed debate about the risks and the rewards, importantly while activists

opposed to any fossil fuels may wish it wasn't so, there is a broad scientific consensus that natural gas can be responsibly developed and, specifically, that hydraulic fracturing can be safely utilised.

For example, the Australian Council of Learned Academies (ACOLA) stated in its comprehensive and peer reviewed report on shale gas, that the risk of a well casing failure in Australia is low because the industry is committed to ensuring wells are constructed and maintained to the highest standard.

The truth is hydraulic fracturing is a safe, reliable and well understood technology that has already been used successfully here in WA with around 250 wells safely "fracked" since the 1980s.

Guardian readers can be confident that WA's onshore gas industry is strictly regulated, technically advanced and strongly committed to the highest possible environmental and safety standards.

LETTERS AND OPINION

Don't give into fracking fear

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LEST WE FORGET

BRUNN

Stadman Ellis
Chief operating officer, western region, Australian Petroleum Production and Exploration Association

NOTE FROM THE EDITOR
What has size got to do with it? Plenty when it comes to the letters to the Editor page. Letters which are short and sharp will be given preference. The request to do so has come from readers. We reserve the right to edit for space and legal reasons. Please note letters are the opinion of the writer, not the Geraldton Guardian.

Roadworks

South West
Road construction, at Greenough River Bridge
Roadworks, near the Indian Ocean Drive intersection
Pavement Repairs, 15km north of Dampier in Geraldton
Lane Marking, near South Gully Road

Goldfields
Road Construction, between Windermere and Albany
Great Northern
Pavement Edge Repairs, Western Side south of Mt Magnet
North West Coastal
Vegetation Works, Northampton to Shark off Northampton Boundary
Watershed
Road construction from Meekatharra

Permit on Vegetation Works, within section Geraldton Mt Magnet Rd
Vegetation Works, Airport to Golden Gate of 10km
Johns Well
Maintenance
Chapman Valley
Vegetation Works, between Coalfields Road and Harding Creek Turnoff

Minerals are actively mined with confidence they all agree and agree when travelling through roadwork sites, for all your up to date information please call our 24hrs Customer Information Centre on 18 1888 log onto our website www.petroleumaustralia.gov.au To put the week in clear show your priority and be waiting for you

On 29 July 2014 Appea wrote to West Australian Newspapers Limited (WAN) "lodging a formal complaint" that the advertisement could reasonably be expected to have misled and deceived readers of *The Geraldton Guardian*. (attachment 1)

http://www.appea.com.au/wp-content/uploads/2014/09/MB_advertisingcomplainte_letter.pdf

Complaint Process

As a member of the Publishing Advertisers Bureau WAN has, as it is obliged to do, considered the complaint and this is its response.

Submissions

On 4 and 13 August 2014 Appea made submissions in support of the complaint (attachment 2) http://www.appea.com.au/wp-content/uploads/2014/09/KM_furtherinfo_letter.pdf

On 22 August 2014 the CCWA made submissions on behalf of Frack Free Geraldton (attachment 3) http://www.appea.com.au/wp-content/uploads/2014/09/CCWA_complaintresponse_letter.pdf

Specific Complaints

Appea complains that three statements from the advertisement are misleading and deceptive. Those statements are as follows:

1. "Shale fracking, the process of extracting gas by using toxic chemicals to crack deep rocks, can turn our water into a dangerous chemical cocktail"
2. "Research in the US has found that 6% of fracking wells leak into ground water in their first year"
3. "Once our water is contaminated, it will be forever"

Findings

In each case the statements are misleading and deceptive for the reasons set out below.

Reasons

In order for it to be found that statements in an advertisement, such as those the subject of this complaint, raising technical environmental issues, could reasonably be expected to have mislead or deceived readers, it needs to be established that it is more likely than not that the statements do not reflect contemporary scientific views held by reputable scientific experts in that field of science; and those statements are likely to lead readers into error in relation to the scientific position and consequences of the circumstances described.

The reader who must be more likely than not to have been misled or deceived is the ordinary reasonable reader. That is a reader of average intelligence, not an expert in the particular scientific area but not a person incapable or disinterested in scientific issues of general public interest. The ordinary reasonable reader will not be avid for scandal nor unsympathetic to the expression of concerns in relation to environmental matters.

The ordinary reasonable reader will not be trained in, or conversant with, fine technical scientific details or issues. Such a reader will not be concerned with unlikely or unusual exceptions to the general scientific state of affairs. While a statement may be true or false, or debatable, or

susceptible to different views at a high level of scientific detail such a reader will not be interested in, and will be incapable of discerning, scientific niceties at such a level of minute detail.

Statement 1:

“Shale fracking, the process of extracting gas by using toxic chemicals to crack deep rocks, can turn our water into a dangerous chemical cocktail”

Appea makes three complaints in relation to this statement:

- (1) **Appea contends that shale fracking is not the “process of extracting gas”. It says that hydraulic fracking is a technology used to enhance the flow of gas from a well once the drilling is completed and the rig is removed from the scene.**

While there may be a technical difference between “extraction of gas” on the one hand, and “enhancement (of) the flow of gas” or “a method to increase the rate of extraction” of gas on the other, that difference will be of no material impact on the general understanding of the issue by the ordinary reasonable reader. What is being done by the use of these words is to give a short descriptive identification to the words “shale fracking”. “Shale fracking” is commonly referred to as “shale gas extraction”. The Chartered Institute of Environmental Health (UK) “Shale Gas and Fracking: Examining the Evidence” (Harrison, Parkinson and McFarlane, July 2014) (<http://catskillcitizens.org/learnmore/SGR-CIEH-Shale-gas-bfg.pdf>) says that the pathways along which oil and gas migrate following fracking and the consequent enhancement of the flow of gas from a well is commonly referred to as “shale gas extraction” (see figure 1, p4). In the executive summary on p3 of that report “fracking” is described as “the hydraulic fracturing technique used to extract natural gas and oil from rocks such as shale”.

While technically shale fracking is not a “process of extraction” but a method to enhance the extraction of gas, the ordinary reasonable reader will not be led into error by this description. The description is used generally to describe the process in an ordinary or garden variety way.

To describe it this way is not misleading or deceptive.

- (2) **Appea contends that “toxic chemicals” are not used “to crack deep rocks”.**

Appea contends that this statement is misleading because it is not “chemicals (or “additives” as they are described by Appea) that “crack” the rock. Rather the “cracking” occurs by the “pressure applied to a fluid system”.

At a technical engineering level there is no doubt that this is correct. GISERA, Hydraulic fracturing <http://gisera.org.au/publications/factsheets/hydraulic-fracturing.pdf> WA Department of Mines and petroleum (2014), Natural Gas from Shale and Tight Rocks Fact Sheet Chemicals used in hydraulic fracturing [http://www.dmp.wa.gov.au/documents/Chemicals used in hydraulic fracturing.pdf](http://www.dmp.wa.gov.au/documents/Chemicals%20used%20in%20hydraulic%20fracturing.pdf)

To the ordinary reader however, whether the process is a chemical process or an hydraulic process is largely beside the point. The fact is that “toxic chemicals” are used in the process as identified in the technical papers referred to by CCWA in its submission of 22 August 2014.

Government of Western Australia, Department of Health's submission to the WA Parliamentary Inquiry into Unconventional Gas

[http://www.parliament.wa.gov.au/Parliament/commit.nsf/%28Evidence+Lookup+by+Com+ID%29/9D7EF06DA3B8A9C348257C40000FA2F2/\\$file/ev.fra.131004.sub.107.+wa+department+of+health.pdf](http://www.parliament.wa.gov.au/Parliament/commit.nsf/%28Evidence+Lookup+by+Com+ID%29/9D7EF06DA3B8A9C348257C40000FA2F2/$file/ev.fra.131004.sub.107.+wa+department+of+health.pdf) See <http://fracfocus.org/chemical-use/what-chemicals-are-used> and also Appea's website <http://www.Appea.com.au/oil-gas-explained/operation/hydraulic-fracturing-fracking/>

However, the amount of "toxic chemical" added to fracturing fluid is comparatively small. The chemicals added to the fracking fluid comprise between 0.05% (CCWA letter 22 August 2014) and 0.5%

WA Department of Mines and petroleum (2014), Natural Gas from Shale and Tight Rocks. [http://www.dmp.wa.gov.au/documents/NaturalGas from Shale and tight Rocks – An overview of Western Australia regulatory framework.pdf](http://www.dmp.wa.gov.au/documents/NaturalGas%20from%20Shale%20and%20tight%20Rocks%20-%20An%20overview%20of%20Western%20Australia%20regulatory%20framework.pdf)

The statement that "toxic chemicals" are used to crack deep rocks creates the impression that toxic chemicals "alone", certainly not in such small percentage quantities are used to frack.

This is not the case.

This view is reinforced by the representation of the black fluid in the bottle of water pictorially represented in the advertisement.

To an ordinary reasonable reader the words of the advertisement and the accompanying illustration together create the impression that the amount of "toxic chemical" used is a much greater concentration that is in fact the case.

The illustrated statement is an exaggeration, materially so, and is misleading and deceptive.

- (3) **While shale fracking can loosely be described as a process of extracting gas by using toxic chemicals to crack deep rocks the advertisement goes on to say that this process can "turn our water into a dangerous chemical cocktail". Appea contends that using toxic chemicals in shale fracking will not turn our water into a dangerous chemical cocktail and that the advertisement is misleading when it says otherwise.**

The words the subject of this part of the complaint must also be read in the context of the picture that accompanies the words in the advertisement. That picture shows (see above) a syringe discharging what appears to be black fluid into a bottle of water. This is no doubt intended, as it plainly does, to represent the "toxic chemicals" used in the shale fracking process "turning our water into a dangerous chemical cocktail".

That illustration would appear to reflect a substantial contamination of the water by the black "toxic chemical" fluid. In the order of 70% of the water appears to be substantially "contaminated" by the black fluid.

It is in that context that the words (to the effect) that the toxic chemicals used in shale fracking can turn our water into a dangerous chemical cocktail – to the extent as is represented by the illustration set out in the advertisement – needs to be considered.

Shale gas resources are typically separated from fresh water aquifers by impermeable layers

WA Department of Mines and petroleum (2014), Natural Gas from Shale and Tight Rocks.
[http://www.dmp.wa.gov.au/documents/NaturalGas from Shale and tight Rocks – An overview of Western Australia regulatory framework.pdf](http://www.dmp.wa.gov.au/documents/NaturalGas%20from%20Shale%20and%20tight%20Rocks%20-%20An%20overview%20of%20Western%20Australia%20regulatory%20framework.pdf)
Geoscience Australia and ABARE & ABARE, 2010. Australian Energy Resource Assessment. Report 2010. Geoscience Australia, Canberra

While CCWA refers to what may be an exception in this regard (the Drover – 01 well near Green Head) the consensus of scientific data suggests that there have been no cases internationally of hydraulic shale gas fracturing inadvertently breaching a water source and thereby causing contamination

WA Department of Mines and petroleum (2014), Natural Gas from Shale and Tight Rocks.
[http://www.dmp.wa.gov.au/documents/Natural Gas from Shale and Tight Rocks – An overview of Western Australia regulatory framework.pdf](http://www.dmp.wa.gov.au/documents/Natural%20Gas%20from%20Shale%20and%20Tight%20Rocks%20-%20An%20overview%20of%20Western%20Australia%20regulatory%20framework.pdf)

The WA Department of Mines has said:

“A recent Australian study *Engineering Energy: Unconventional Gas Production – A study of shale gas in Australia, ACOLA May 2013* found there have been no cases internationally where hydraulic fracturing associated with the extraction of shale and tight gas has inadvertently intersected a water source to cause contamination.

Petroleum operators in WA are required to continuously monitor hydraulic fracturing activities to check the small fractures and hydraulic fluids are contained in the rock area targeted deep underground. This ensures gas, as well as the recovery of hydraulic fracturing fluid, does not contaminate overlying water resources.”

The CSIRO has published similar views and concludes:

“Although there are risks associated with hydraulic fracturing, a combination of research from around the world shows us that the risks are low. The largest risks with unconventional gas extraction are associated with surface activities such as ensuring well integrity, water treatment of flowback, vehicle movements, and chemical handling. The risk of contaminating agricultural and drinking water from shale gas extraction is very low in most cases, as the fractures generated by hydraulic fracturing itself are deep under the earth. <http://www.csiro.au/Outcomes/Energy/Energy-from-oil-and-gas/UnconventionalGas/Hydraulic-fracturing.aspx>”

This is not what is represented by the advertisement. CCWA have not produced any evidence that hydraulic fracking fluid has in the course of any hydraulic shale gas fracking process permeated a fresh water aquifer. Its contentions are against the scientific literature. The advertisement is misleading in this regard.

Statement 2:

“Research in the US has found that 6% of fracking wells leak into ground water in the first year”

CCWA has admitted that this statement is not materially correct.

In its response dated 22 August 2014 it said:

“We have reviewed the report and agree with Appea to the extent that Professor Ingraffea’s findings related to well barrier or casing integrity failure which does not necessarily mean that leakage into groundwater has occurred in all cases. On further consideration, a more accurate statement would perhaps be that “6% of fracking wells leak into groundwater, surface water, soil or air in the first year”

The statement made is misleading and deceptive.

Statement 3:

Once our water is contaminated, it will be forever.

The contentions put forward by CCWA in support of this statement in its submission dated 22 August 2014 are without any independent scientific support. They are unsupported assertions.

Appea relies on published scientific papers . EPA Victoria (2014) The cleanup and management of polluted groundwater Guidelines <http://www.epa.vic.gov.au/-/media/Publications/840%201.pdf> Sinha et al (2009), Bioremediation of Groundwater <http://www98.griffith.edu.au/dspace/bitstream/handle/10072/38972/697471.pdf;sessionid=740A1F1DSA0623478C01DA88EA09BE?sequence=1> CSIRO Soil and Groundwater Remediation <http://www.clw.csiro.au/research/urban/protection/remediation/projects2.html> US EPA Groundwater Contamination <http://www.epa.gov/superfund/students/wastsite/grndwatr.htm> all of which record that to a greater or lesser degree, and depending upon the particular circumstances, remedial steps can be taken to resolve or alleviate water contamination. Comments to similar effect are made in the report from The Australian Council of Learned Academies: Engineering Energy: Unconventional Gas Production, a study of shale gas in Australia, May 2013:

“Contamination of aquifers and surface water can result from chemical spillage. The industry already has rigorous systems for dealing with spillage, or from the incorrect disposal of the hydraulic fracturing fluid (already controlled by regulators under most jurisdictions), or from produced water. Contamination can also potentially occur via leakage from a borehole into a freshwater aquifer, due to borehole failure, particularly from abandoned bores, or (though less likely) from an incorrect hydraulic fracturing operation. These are unlikely to occur if best practice is followed, but regulations need to be in place and enforced, to help to ensure this (p16).

“There appear to be few other studies on which to base the statistical rate of well failure bearing in mind the definition of failure requires careful specification. To alleviate public concern with well leakage and loss of integrity, which is significant, (Nikiforuk, 2013) the auditing of well performance with respect to failure will be important.

Even with a failure rate as low as 0.5% (The Royal Society and the Royal Academy of Engineering, 2012, p.26), with large shale gas fields and many of them, well numbers in excess of 10,000 are feasible in Australia and this could mean 50 “failed” wells. However this does not necessarily imply major environmental or other consequence as well failure may involve for example low leakage rates of fluid, which can be readily remediated (p128).”

Against that background the statement that once contaminated water will forever be contaminated is not supported by contemporary scientific views and is misleading and deceptive.

17 September 2014

Tony McCarthy
Group General Counsel

