

essence, not make sense for them to furnish the complete list. It is worth noting that, according to the aforementioned representatives, minutes of the relevant public participation meetings were being taken. Consequently, it is submitted that, in the event that accurate minutes were in fact kept and can be made available, such minutes will reveal that the relevant representatives admitted to having the full list of chemicals at their disposal but purposefully avoided making any commitment to furnish copies thereof to those who had requested it. Consequently, the statement that **“Shell can’t be more specific at this time”** is false, alternatively, Shell’s representatives at the public participation meetings were being dishonest. Either way, it appears that, in relation to the issue of the chemicals that Shell intends to use in its hydraulic fracturing operations, Shell has not been truthful in its dealings with the public.

4.1.2.8.2. As previously mentioned, studies have demonstrated that hundreds of hazardous, highly toxic and carcinogenic chemicals are employed in hydraulic fracturing. In the United States of America, various oil and gas companies were recently called upon, by the aforementioned Committee on Energy and Commerce, to disclose, amongst other things, the chemical contents of the hydraulic fracturing products that they had utilised. It came to light that, between 2005 and 2009, the 14 oil and gas companies in question had used more than 2 500 hydraulic fracturing products containing as many as 750 chemicals. A truly significant number of these chemicals were identified as posing a severe risk to human health and the environment. Unsurprisingly, it has been documented that oil and gas companies are opposed to public disclosure of the chemicals used in hydraulic fracturing. In relation to this point, the Advert reveals that Shell is no

different. Shell is attempting to mislead the public by implying that due to the “unique” nature of each well, it “**can’t be more specific at this time.**” This statement is false as the individual characteristics of each well is not a justifiable excuse for Shell not to furnish interested parties with a list of all the potential additives that it may choose to use at any given well, particularly when Shell’s representatives have advised that they have such a list at their disposal.

4.1.2.8.3. The statement that “**Shell can’t be more specific at this time**” appears in a paragraph below the subheading “**Disclosure/Transparency**”. In view of the various complaints above, this subheading, in and of itself, is misleading as Shell has not allowed for disclosure/transparency as regards the chemical additives used in hydraulic fracturing. A claim to disclosure/transparency as regards the additives that Shell intends to use for hydraulic fracturing comes across, quite simply, as false advertising that, again, will mislead readers of the Advert.

4.2. Section II, Clause 4.2.2, of the Code:

4.2.1. Section II, Clause 4.2.2, of the Code provides as follows: “Value judgments, matters of opinion or subjective assessments are permissible provided that: it is clear what is being expressed is an opinion; there is no likelihood of the opinion or the way it is expressed, misleading consumers about any aspect of the a product or service which is capable of being objectively assessed in the light of generally accepted standards. The guiding principle is that puffery is true when an expression of opinion, but false when viewed as an expression of fact.”

4.2.2. As previously mentioned, no logical connection exists between the “**coupling**” of hydraulic fracturing and horizontal drilling and the alleged “**increased awareness of the benefits of natural gas.**” Any such connection is a matter of opinion or a subjective assessment by Shell and, by incorporating such a statement amongst various statements of apparent fact – such as the size of rock pores and the date on which hydraulic fracturing was first used to stimulate the flow of natural gas – it is implied that “**an increased awareness of the benefits of shale gas**” is also a statement of fact. In other words, the statement in question is incorrectly being passed off as a statement of fact. It is not clear that what has been expressed in the Advert is a matter of opinion. Thus, it must, in accordance with the abovementioned guiding principle, be viewed as mere puffery that is false.

4.3. Section II, Clause 2, of the Code:

4.3.1. Section II, Clause 2, of the Code, which appears under the heading, “Honesty,” states: “Advertisements should not be framed so as to abuse the trust of the consumer or exploit his lack of experience or knowledge or his credulity.”

4.3.2. The Advert states that: “**A typical fracture treatment uses very low concentrations of between three and 12 additives, depending on the unique characteristics of each well. The US Department of Energy maintains lists of those additives, as well as other useful information, online...**”

4.3.3. The above statement is in breach of Section II, Clause 2, of the Code as it attempts to exploit the lack of experience on the part of the Advert’s readers in relation to the true number and nature of the chemical additives used in hydraulic fracturing. In this regard, you are referred to the discussion under point 4.1.2.7 above.

4.4. Section V, Clause 2.1, of the Code:

4.4.1. In relation to a print advertisement occupying part of a whole page or part of a page, Section V, Clause 2.1, of the Code provides that: "The word ADVERTISEMENT should stand alone at the head of the advertisement in such size and weight of type as to be easily seen."

4.4.2. The Advert does not contain the word "ADVERTISEMENT" as is required by Section V, Clause 2.1 of the Code.

4.5. Clause 1.2.3 of Appendix J to the Code:

4.5.1. Clause 1.2.3 of Appendix J to the Code provides that "all environmental claims and statements made in Advertising should provide accurate information, meaningful to the consumer and based on recognized scientific standards and principles." Various environmental statements and claims made in the Advert are in breach of Clause 1.2.3 of Appendix J to the Code, including the following:

4.5.1.1. "MULTIPLE LAYERS OF STEEL CASING AND CEMENT PROTECT GROUNDWATER AQUIFERS"

4.5.1.1.1. The extent to which the above statement constitutes a breach of Section II, Clause 4.2.1, of the Code is discussed under point 4.1.2.4 above. Suffice it to state that, due to the environmental nature of the claim made in the relevant statement, the Advert also constitutes a breach of Clause 1.2.3. of Appendix J to the Code.

4.5.1.2. "...increased awareness of the benefits of shale gas."

4.5.1.2.1. Without any scientific basis, Shell has stated that the “coupling” of hydraulic fracturing and horizontal drilling has lead to an “increased awareness of the benefits of shale gas.” This statement is, as previously explained, being inappropriately passed off as a fact and it is misleading.

4.5.1.3. **“There has never been a single documented case of groundwater contamination resulting from fracturing, according to a host of independent environmental regulators.”**

4.5.1.3.1. As previously explained, there have been documented cases of groundwater contamination resulting from fracturing and thus the above statement is inaccurate and misleading and in breach of Clause 1.2.3 of the Code.

4.5.1.4. **“Top environmental regulators from Colorado and Oklahoma – major energy-producing states where fracturing has been responsibly used tens of thousands of times for decades to enhance oil and natural gas development – recently testified before the U.S. Congress, confirming that “there has not been a single documented instance of contamination to groundwater or drinking water as result of hydraulic fracturing” and that “we have found no verified instance of hydraulic fracturing harming groundwater.”**

4.5.1.4.1. The statement that “fracturing has been responsibly used tens of thousands of times for decades...” is, as previously explained, inaccurate and misleading.

4.6. Clause 1.2.4 of Appendix J to the Code:

- 4.6.1. Clause 1.2.4 of the Appendix J to the Code states *inter alia* that “advertisements should not contain vague, incomplete or irrelevant statements about environmental matters....”
- 4.6.2. The Advert states that: “**A typical fracture treatment uses very low concentrations of between three to 12 additives, depending on the unique characteristics of each well.**”
- 4.6.3. It is submitted that the aforesaid statement has direct bearing on environmental concerns and is misleading as it conveys incomplete information and, consequently, a misleading message as regards the concentrations of chemicals employed in a typical fracture treatment. You are referred to the complaints against this particular statement, which are discussed under points 4.1.2.7. and 4.3.2 above.

4.7. Clause 2.1 of Appendix J to the Code:

- 4.7.1. Clause 2.1 of Appendix J to the Code states that “advertisements containing unqualified claims and statements about environmental matters will be interpreted as meaning 100%, and shall be subject to substantiation. The same principle will apply to descriptions such as “...free” or “contains no...” which will be assumed to claim total absence of the stated substance.”
- 4.7.2. The Advert contains the following: “**...Colorado and Oklahoma – major energy-producing states where fracturing has been responsibly used tens of thousands of times for decades...**”
- 4.7.3. It is submitted that the unsubstantiated phrase “tens of thousands of times for decades” must, in accordance with the provisions of Clause 2.1 of Appendix J to the Code, be interpreted as meaning “100%” of the time in question. In other words, Shell is claiming that fracturing has never been irresponsibly used in Colorado or Oklahoma. Such a

claim is untrue as studies have shown that, in relation to environmental matters, hydraulic fracturing in Colorado and Oklahoma has on many occasions resulted in environmental degradation and had negative effects on health. In other words, fracturing has not been as responsibly used as Shell would have the public believe and thus the Advert contains false information, which Shell is clearly attempting to use as a means by which to mislead the public.

4.8. Section II, Clause 4.1.1, of the Code:

4.8.1. Section II, Clause 4.1.1, states that: "Before advertising is published, Advertisers shall hold in their possession documentary evidence...to support all claims, whether direct or implied, that are capable of objective substantiation."

4.8.2. We are instructed that, in the event that Shell is called upon to furnish the ASA with appropriate documentary evidence supporting the various claims made in the Advert, which documentary evidence they are obliged to have had in their possession prior to publication of the Advert, they will not be in a position to do so. We are instructed further to request that the ASA call upon Shell to make available for consideration by the ASA and all interested parties any such documentation.

Conclusion

5. In the light of the foregoing, we are instructed to note as follows:

5.1. Section I, Clause 3.2, of the Code provides, amongst other things, that "In assessing an advertisement's conformity to the terms of this Code, the primary test applied will be that of the probable impact of the advertisement as a whole upon those who are likely to see or hear it." In view of the extent to which the Advert is in breach of the Code, as set out above, the probable

impact of the Advert as whole, upon those that are likely to see it or have seen it, is that they will be misled as to the true state of affairs relating not only to the relevant environmental and health threats posed by hydraulic fracturing but also to Shell's apparent transparency and willingness to disclose the nature of the chemicals that it intends to use.

5.2. Clause 11 of the Preface to the Code states that "advertising is a service to the public and, as such, should be informative, factual, honest, decent and its content should not violate any of the laws of the country." In the light of all of the foregoing criticisms of the Advert, the information contained therein is, to a truly substantial degree, not factual; instead, it is misleading and indicative of dishonesty.

5.3. Clause 11 of the Preface to the Code also states that "All entities bound by the Code shall neither prepare nor accept any advertising which conflicts with the Code and shall withdraw any advertising which has subsequently been deemed to be unacceptable by the ASA Directorate, Advertising Standards Committee, Advertising Industry Tribunal or Appeal Committee." In view of the multitude of false and misleading information contained in the Advert, it is submitted that the Sunday Times, the Cape Times and Shell, which are all bound by the Code, must be instructed to withdraw the Advert immediately.

6. At this juncture, it is perhaps worth pointing out that Shell has described the Advert as part of "a series" and that, if the Advert in question is any indication of the nature of future advertisements in such a series, such a series will amount to nothing more than a misleading media campaign, littered with half-truths and designed to deceive the people of South Africa as regards the negative consequences of and the risks posed by hydraulic fracturing.

7. Finally, as noted above, advertising is a service to the public. By acknowledging that the Advert is in breach of the Code and by taking appropriate steps in that regard, the ASA has an opportunity to help ensure that any further Adverts in the

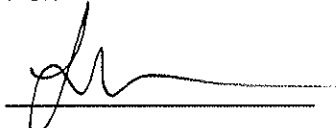
aforementioned “series” will not contain false information and further mislead those members of the public who have already been and may in future again be exposed thereto.

8. We look forward to receiving your favourable response hereto at your earliest convenience and we invite you to contact the writer directly should any of the aforesaid require clarification.

Yours faithfully,

HAVEMANN INC

Per:

A handwritten signature in black ink, appearing to be 'L Havemann', is written over a horizontal line.

DR LUKE HAVEMANN

DIALOGUE ON THE KAROO



As part of our continuing effort to build a broader public dialogue regarding potential exploration activities in the Karoo, Shell wants to provide additional information related to questions raised during recent public meetings and other conversations. Some of the information in this series will be provided by Shell's engineers and scientists, and we will provide information from third-party experts when appropriate.

History of Hydraulic Fracturing

Q. Shell says hydraulic fracturing has been around for 60 years. Why haven't people heard of it?

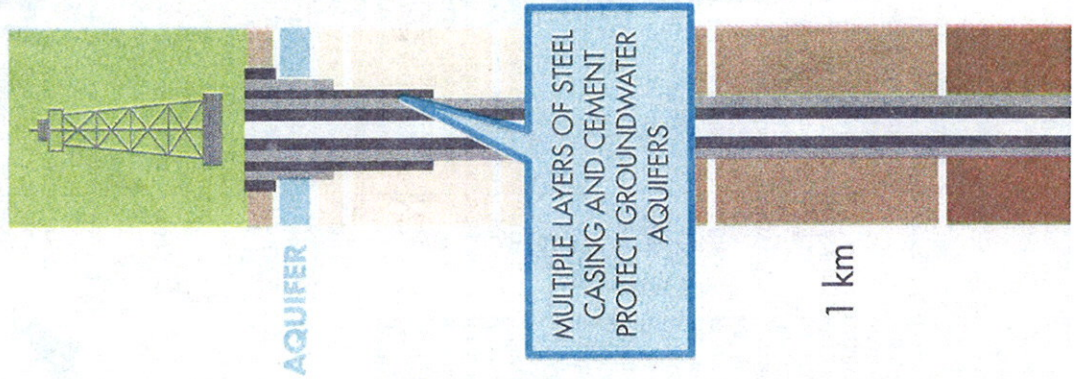
A. Shale gas is natural gas held in rock pores that are up to 20,000 times narrower than a human hair. Often the gas will not flow freely into a well, or will flow at a much slower rate than in normal gas reservoirs.

The first use of hydraulic fracturing to stimulate the flow of natural gas occurred in 1947 in the Hugoton field in Kansas, USA. But deep shale gas formations didn't become commercially recoverable until the recent coupling of two technologies—hydraulic fracturing and horizontal drilling. This marriage of technologies has led to dramatic increases in the availability of natural gas from deep shale formations, as well as increased awareness of the benefits of shale gas. Today, hydraulic fracturing is used at nearly nine out of every 10 natural gas wells.

Groundwater Protection

Q. Has hydraulic fracturing ever impacted groundwater resources or water wells?

A. There has never been a single documented case of groundwater contamination resulting from fracturing, according to a host of independent environmental regulators. Top environmental regulators from Colorado and Oklahoma—major energy-producing states where fracturing has been responsibly used tens of thousands of times for decades to enhance oil and natural gas development—recently testified before the U.S. Congress*, confirming that *"there has not been a single documented instance of contamination to groundwater or drinking water as result of hydraulic fracturing" and that "we have found no verified instance of hydraulic fracturing harming groundwater."*



* U.S. Senate Environment and Public Works Committee, April 12, 2011. Testimony from David Neslin, Colorado Oil and Gas Conservation Commission director.

PROTECT GROUNDWATER AQUIFERS

Groundwater Protection

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* U.S. Senate Environment and Public Works Committee, April 12, 2011. Testimony from David Neslin, Colorado Oil and Gas Conservation Commission director; Jeff Cloud, Oklahoma Corporation Commission vice chairman

Disclosure/Transparency

Q. Why won't Shell say what additives would be used in the fracturing process?

A. For the exploration project, we will disclose fracturing fluids at each drilling location, and consult with communities as part of the development of hydraulic fracturing plans. A typical fracture treatment uses very low concentrations of between three and 12 additives, depending on the unique characteristics of each well. The U.S. Department of Energy maintains lists of those additives, as well as other useful information, online at: www.fossil.energy.gov/programs/oilgas/publications/naturalgas_general/Shale_Gas_Primer_2009.pdf. Since each well is unique and requires a different blend of additives depending on a number of factors, including the geology of the shale formation, depth of the formation and temperature of the rock at depth, Shell can't be more specific at this time.

We encourage you to join this dialogue. For more information, please visit www.shell.co.za/karoo.

HORIZONTAL
DRILLING

HYDRAULIC
FRACTURING

SHALE

1 km

2 km

3 km

