Frack Free United PO box 105 Malton YO17 1DD

14th Aug 2018

Dr Sarah Wollaston MP Health and Social Care Select Committee House of Commons London SW1A 0AA

Dear Ms Wollaston

We, the undersigned, respectfully request that the Health and Social Care Select Committee undertake a comprehensive review of all current available evidence related to the health impacts of unconventional oil and gas production in the UK, in particular hydraulic fracturing for shale gas extraction (also known as fracking).

The most recent report¹ from the UK Government on fracking and health was published back in June 2014 by Public Health England (PHE), which is an executive agency of the Department of Health. However, this report was very limited in scope, and only provided advice on "the potential public health impacts of exposures to chemical and radioactive pollutants as a result of shale gas extraction", and did not assess any other public health or social impacts of fracking.

The limited scope of the PHE report is acknowledged in its summary (section 10), which states: "Other considerations, such as water sustainability, noise, traffic (apart from vehicle exhaust emissions), odour, visual impact, occupational exposure and wider public health issues have not been addressed. However, should commercial-scale shale gas extraction be introduced, such issues will need careful evaluation on both a national and local scale." It has since become clear that the Government and the oil and gas industry are determined to move towards commercial-scale shale gas extraction as soon as possible, despite overwhelming opposition from concerned local communities up and down the country, yet no further study of the wider health impacts of fracking has been commissioned, as was recommended in the PHE report summary.

Furthermore, the PHE report was based on selective research published up to January 2014, and its conclusions are therefore over four years old. Meanwhile, in the intervening years there have been literally hundreds of peer-reviewed scientific studies on the health impacts of fracking published around the world. There is now convincing scientific evidence that fracking is a danger to the health and well-being of people living near well-sites, with several studies pointing to an increase in premature births, miscarriages, birth defects, cancer, heart attacks, migraines, childhood asthma, and a variety of other lung and skin diseases. Despite the wealth of new research, and the PHE report's recommendation that "further work will be required to define better the potential health impact of shale gas extraction" (p55), there has been no further review of current evidence by PHE or any other Government body.

While the UK Government has been reluctant to assess the growing body of evidence of the health impacts of fracking, other organisations around the world have been taking the lead. One of the most thorough and wide-ranging reviews of scientific evidence is the **Compendium of Scientific, Medical and Media findings Demonstrating Risks and Harms of Fracking**², which is produced by The Concerned Health Professionals of New York³ and the Nobel Peace Prize-winning organisation Physicians for Social Responsibility⁴. The fifth edition of the Compendium was published in March 2018 and drew upon government assessments, news investigations and more than 1,200 peer-reviewed research articles – most of which have been published in the last four years.

The Fifth Compendium's conclusion reads as follows: "All together, findings to date from scientific, medical, and journalistic investigations combine to demonstrate that fracking poses significant threats to air, water, health, public safety, climate stability, seismic stability, community cohesion, and long-term economic vitality. Emerging data from a rapidly expanding body of evidence continue to reveal a plethora of recurring problems and harms that cannot be sufficiently averted through regulatory frameworks. There is no evidence that fracking can operate without threatening public health directly or without imperilling climate stability upon which public health depends."

Dr Sandra Steingraber, one of the Compendium's eight co-authors and a biologist who works in the field of public health, said, "Fracking is the worst thing I have ever seen. Those of us in the public health sector started to realise years ago that

 $^{^{1}\} https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/332837/PHE-CRCE-009_3-7-14.pdf$

² http://concernedhealthny.org/compendium/

³ http://concernedhealthny.org/

⁴ http://www.psr.org/

here were potential risks. Now we see these risks turn into human harms and people are getting sick. And we in this field have the moral imperative to raise the alarm."

Back in the UK, the health professionals' charity Medact reviewed over 350 academic papers published in the previous twelve months on the impacts of fracking in 2016. The resulting report, **A Public Health Assessment of Shale Gas In England**⁶, concluded that there are risks of the following negative health impacts of fracking:

- Potential health hazards associated with air pollution and water contamination; these include toxins that are linked to increased risks of cancer, birth defects and lung disease.
- Negative health impacts associated with noise, traffic, damage to the natural environment and local social and economic disruption
- The indirect effects of climate change produced by greenhouse gas emissions caused by fracking

Following the Medact report's release, an open letter⁷ was also published in the British Medical Journal and signed by 18 eminent health care professionals. The letter concluded: "The arguments against fracking on public health and ecological grounds are overwhelming. There are clear grounds for adopting the precautionary principle and prohibiting fracking."

The Medact report's findings were also endorsed by the UK's Faculty of Public Health (FPH)⁸, whose President, Professor John Middleton, said: "The regulatory system for fracking is incomplete and weak, (and) the precise level of risk to human health from fracking cannot be calculated. Intensive levels of fracking activity could pose additional risks in the UK when compared to experiences elsewhere because of the proximity and size of surrounding populations."

Concern is also growing among the UK medical profession in the wake of the Government's decision to allow fracking to take place at Cuadrilla's Preston New Road site in Lancashire. Dr Barbara Kneale, a consultant in occupational medicine, and Dr Francis Rugman, a retired consultant haematologist, recently wrote to Claire Perry, Minister of State for Energy and Clean Growth, calling for an immediate moratorium until there has been an evaluation of all the evidence on health, safety and environmental issues on fracking. Their letter⁹ argues that "the Cuadrilla site at Little Plumpton will be used as a prospective observational study to monitor emissions of toxic chemicals, known to adversely impact human health. Many question whether such an experiment complies with ethical guidelines. This is not 'gold standard' regulation. Are human receptors (i.e. Fylde residents) to be used as 'guinea-pigs'?"

Other respected international organisations, such as PSE Healthy Energy¹⁰ and The Chem Trust¹¹, have also reviewed recent research on fracking and have similar concerns about its negative health impacts. And while the UK government continues to rely on outdated reports and to justify its pro-fracking policy, other countries are taking action to protect their citizens. Last year the Republic of Ireland and Scotland undertook thorough reviews of current evidence of the environmental, economic and health impacts of this controversial technology, and have joined the growing number of countries and states that have effectively banned fracking.

The Scottish enquiry was described in the International Journal of Environmental Research and Public Health ¹² as "the first truly national assessment of the public health and related implications of Unconventional Oil and Gas Exploration". The authors of the research paper praised the high level of public engagement in the enquiry, which received over 60,000 responses to a public consultation, and added, "Rarely have governments brought together relatively detailed assessments of direct and indirect public health risks associated with fracking and weighed these against potential benefits to inform a national debate on whether to pursue this energy route." They also described the 2012 Royal Society review of fracking ¹³ as 'somewhat dated' and criticised the 2014 PHE report for its limited scope and for focusing on theoretical best practices, rather than on what actually happened.

The Scottish Energy Minister, Paul Wheelhouse, said: "Balancing the interests of the environment, our economy, public health and public opinion, I can confirm that the conclusion of the Scottish Government is that we will not support the

⁵ https://www.rollingstone.com/politics/news/fracking-health-risk-asthma-birth-defects-cancer-w517809

⁶ https://www.medact.org/2016/resources/reports/shale-gas-production-in-england/

http://www.bmj.com/content/348/bmj.g2728/rr

 $^{^{8}\} http://www.fph.org.uk/government_gives_green_light_for_fracking_\%E2\%80\%93_and_for_serious_public_health_and_environmental_risks$

 $^{^9\} https://investigatingbalcombeand cuadrilla. files. wordpress.com/2018/08/consultants-letter-to-claire-perry.pdf$

 $^{^{10}}$ https://www.psehealthyenergy.org/our-work/publications/archive/toward-an-understanding-of-the-environmental-and-public-health-impacts-of-shale-gas-development-an-analysis-of-the-peer-reviewed-scientific-literature-2009-2015/

 $^{^{11}\} http://www.chemtrust.org/wp-content/uploads/chemtrust-fracking-briefing-june 2015.pdf$

 $^{^{12} \;} http://www.mdpi.com/1660-4601/15/4/675/htm$

¹³ https://royalsociety.org/topics-policy/projects/shale-gas-extraction/report/

development of unconventional oil and gas in Scotland."¹⁴ The Irish Government's Joint Committee on Communications, Climate Action and Environment stated that any perceived benefits of fracking are "**outweighed by the risks to the environment and human health from an as-yet relatively untried technology**."¹⁵ With de-facto moratoria also in place in Wales and Northern Ireland, England is now the only country in the UK where fracking for shale gas is still allowed.

In conclusion, there is a vast amount of rigorously researched, peer-reviewed evidence now available on the health impacts of fracking, most of which has been published since the 2014 PHE report upon which the Government relies so heavily. This new evidence has been thoroughly reviewed by the Scottish Government, which concluded that fracking is a danger to public health and has introduced an indefinite moratorium effectively banning the practice north of the border. In contrast, the UK government continues to rely on outdated reports to justify its current pro-fracking policy, and appears content to ignore the wealth of new evidence that shows fracking is a danger to public health.

We therefore request that the Health and Social Care Select Committee undertakes a comprehensive review of all current evidence related to the health and social impacts of fracking and other forms of unconventional oil and gas extraction, with a view to delivering its conclusions in spring 2019.

Yours faithfully

Rt Hon. Norman Lamb MP - Minister of State (Department of Health) Sept 2012 - May 2015

Professor John R Ashton C.B.E. Former President of the UK Faculty of Public Health and Former Chairman of the UK Public Health Association

Dr Mathias Bantz, Internist/Environmental Medicine/Radiation Protection Physician, Rotenburg, Lower Saxony, Germany

Dr. Margaret Jackson, MRCGP DRCOG Dip Ther., PGCME; partner in General Practice; GP trainer; member of Medact

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Mr Steve Mason Campaign Director – Frack Free United

Dr David McCoy

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Professor John Middleton, FFPH, FRCP

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Dr Sandra Steingraber, PhD, biologist, author, Distinguished Scholar in Residence, Environmental Studies and Science Faculty, Dept of Environmental Studies and Sciences, Ithaca College, New York, USA, Concerned Health Professionals of New York

Prof. Peter Strachan, Professor of Energy Policy, Robert Gordon University Aberdeen Business School: Aberdeen

Dr Tim Thornton, MA.MB. BChir - Retired GP

Professor Andrew Watterson PhD CFIOSH Fellow Collegium Ramazzini

Occupational and Environmental Health Research Group, Faculty of Health Sciences. University of Stirling

 $^{^{14}\} https://www.theyworkforyou.com/sp/?id=2017-10-03.6.0\&s=shale+gas\#g6.2$

 $^{^{15}\} https://www.belfasttelegraph.co.uk/news/republic-of-ireland/irish-parliamentary-watchdog-backs-fracking-ban-risks-outweigh-the-benefits-35610627.html$