

## Tina Graham

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**Subject:** Submission for ALARP Demonstration Guidance Document Consultation process  
**Attachments:** pseexports.pdf

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**From:** rahima sayer  
**Sent:** 21 December 2012 16:23  
**To:** Eamonn Murtagh  
**Subject:** Submission for ALARP Demonstration Guidance Document Consultation process

Dear Eamonn Murtagh

The CER cannot ignore the growing body of evidence that hydraulic fracturing and shale gas recovery may be associated with adverse health risks through exposure to polluted air, water and soil.

I attach a letter signed by medical and scientific professionals in the United States to President Obama, urging him to hold off on moving forward on an extension of the process pending more scientific and epidemiologic information about the potential harm from fracking.

They draw attention to the need for credible science while highlighting that it would be irresponsible and potentially harmful to allow the continuation of fracking and its extension in the absence of well designed scientific studies in order to evaluate and understand the potential harm from fracking.

It is my belief that the Precautionary Principle must apply and the regulations of ALARP cannot be satisfied against the background of international concern, without a multi disciplinary approach and proper scientific assessment. A Health Impact Assessment of the process must form part of the Safety Case. To do otherwise would be unthinkable. This must be clearly identified in the guidelines and made an absolute requirement for the evaluation of the Safety Case.

In considering a risk assessment, risk analysis, risk evaluation and the societal risk of this industry ,the CER must have regard to the precautionary principle. As stated in the consultation paper “while there can be an element of uncertainty in risk assessment, for a petroleum activity the approach adopted should at least be such that there is sufficient certainty that the results are representative”

It should therefore be a requirement that in the case of fracking where known risks exist based on International experience, that the industry undertaking this process should be required to carry out a Health Impact Assessment as part of their ALARP Demonstration.

“ where there is reason to believe that serious danger could exist, but the scientific evidence is insufficient, inconclusive or uncertain regarding the risk.” . What is therefore reasonably practicable will be determined by the facts of the case.

The total risk associated with the multiple wells and gas pipelines associated with this industry must be assessed on a cumulative basis to include hazard identification. The processes to be undertaken by the industry in the course of exploration and recovery should be described as part of the ALARP Demonstration including a full listing of all chemicals to be used.

Based on the above information (the total risk that persons are exposed to as a result of this industry), the level of hazard identified by the cumulative risk factors associated with the industry should be known and must be assessed. This must require a Health Impact Assessment. The identified hazard associated with any chemicals intended for use must then form part of the ALARP Demonstration and the identification of the correct tolerable zone.

As rightly identified in the discussion paper the first stage in hazard management is the comprehensive identification of hazards. These could have an immediate or long term safety impact to people. It is also considered that hazard identification involves a team approach and a multi disciplinary approach and this is essential for the identification process of ALARP as it relates to fracking. Hazards are diverse and in this case consist of a combination of several. In order to assess the tolerability of fracking the evaluation needs to encompass the entire risk that the public are exposed to. Risk to ground water, air emissions, explosive hazard etc. In this scenario there are a large number of different hazards and potential accidents and the CER must ensure that for the case of fracking this cumulative risk is explicitly addressed.

I ask that the CER give consideration to these points.

Thank you

kind regards

Rahima Sayer

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The President  
The White House  
1600 Pennsylvania Avenue N.W.  
Washington, DC 20500

December 13, 2012

Dear Mr. President,

We the undersigned medical and scientific professionals urge the Obama Administration to put a hold on moving forward on the construction of new liquefied natural gas (LNG) terminals for the large-scale exportation of shale gas to foreign nations. Our concern is that the Administration has not fully examined the potential for harm to health and the environment that could result.

There is a growing body of evidence that unconventional natural gas extraction from shale (also known as 'fracking') may be associated with adverse health risks through exposure to polluted air, water, and soil. Public health researchers and medical professionals question the continuation of current levels of fracking without a full scientific understanding of the health implications. The opening of LNG export facilities would serve to accelerate fracking in the United States in absence of sound scientific assessment, placing policy before health.

As the White House and the Department of Energy contemplate exporting LNG to accommodate international demand for energy, the need for a deliberative process based on sound science is all the more important. We assert that a guiding ethical principle for public policy on fracking should parallel that used by physicians: "First, do not harm."

There is a need for much more scientific and epidemiologic information about the potential for harm from fracking. To facilitate a rapid increase in fracking in the United States without credible science is irresponsible and could potentially cause undue harm to many Americans.

Without well-designed scientific studies, we will not know the extent of potential harm from fracking. We strongly urge the Administration to err on the side of caution as it contemplates national policy regarding the exportation of shale gas.

The health professionals below sign as individuals and do not necessarily represent the views of their employer.

Sincerely,

Adam Law, MD  
Physicians Scientists & Engineers for Healthy Energy  
Cayuga Medical Center  
Weill Cornell Medical College

Seth Shonkoff, PhD, MPH  
Physicians Scientists & Engineers for Healthy Energy  
University of California, Berkeley

**And 108 other health professionals, listed below.**



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