

October 4, 2011

The Honorable Tom Corbett  
200 North Third Street, 14<sup>th</sup> Floor  
Harrisburg, PA 17101

Dear Governor Corbett:

We, the Board of Directors of the Pennsylvania Society of Oncology and Hematology, are deeply concerned that cancer-causing chemicals are entering the Commonwealth's groundwater as a result of hydraulic fracturing.

The Pennsylvania Society of Oncology and Hematology (PSOH) is a state affiliate of the American Society of Clinical Oncology. Our society represents over three hundred physicians, nurses, and health professionals, dedicated to the treatment of patients with cancer. We are frequently called upon to comment on state-based policy and legislation.

In your budget address in March, your announcement that, "Just as the oil companies decided to headquarter in one of a dozen states with oil ... let's make Pennsylvania the Texas of the natural gas boom. I'm determined that Pennsylvania not lose this moment"<sup>1</sup> is cause for alarm.

A congressional investigation sponsored by the Committee on Energy and Commerce disclosed that between 2005 and 2009, the oil and gas industry injected 11.4 million gallons of hydraulic fracturing products containing 29 chemicals that are

- known or probable human carcinogens
- regulated under the Safe Drinking Water Act due to human health risks
- designated as hazardous air pollutants under the Clean Air Act.

Hydraulic fracturing chemicals contained diesel, naphthalene, sulfuric acid, thiourea, Benzyl chloride, Nitrilotiacetic acide, benzene, Di (2-ethylhexyl) phthalate, acrylamide, Hydrogen fluoride (hydrofluoric acid), acetaldehyde, Ethylene oxide, lead and Propylene oxide, all known, probable or possible carcinogens.<sup>2</sup> The resultant carcinogenic contamination of our water supply could be catastrophic.

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<sup>1</sup><http://www.wgal.com/politics/27119071/detail.html#ixzz1WMgAWfOG>

<sup>2</sup><http://democrats.energycommerce.house.gov/sites/default/files/documents/Hydraulic%20Fracturing%20Report%204.18.11.pdf>

Scientific reports from Duke University and elsewhere, document the presence of hydraulic fracturing chemicals in the ground water of communities where these activities occur. Groundwater travels. Once carcinogens are released into the ground, they can contaminate streams and rivers and infiltrate aquifers, ultimately poisoning water supplies throughout the region. Although the gas and oil companies purportedly adopt safety measures, it is impossible to guarantee the integrity of the water system into which they are drilling.

The full environmental and health-related consequences of hydraulic fracturing will not be realized for many years. If Marcellus Shale continues to be exploited, exposure to carcinogens, such as benzene<sup>3</sup> and acrylamide<sup>4</sup> will result in heightened incidence of leukemia, rare tumors and other environmentally associated malignancies. By the time cancer rates increase it will be too late to clean the water and we will be unable to decontaminate the soil. Generations will have persistent exposure to these bioaccumulative and toxic pollutants.

An important lesson about environmental toxins can be learned from lung cancer, the leading cause of cancer death with direct ties to smoking. At the turn of the 20<sup>th</sup> century, cigarette usage was minimal. Following World War I, smoking gained a reputation for being patriotic and cigarette use was encouraged by the US government. Tobacco abuse increased exponentially and the rate of lung cancer swelled approximately 35 years later.

The tragedy of lung cancer underscores the fact that the implications of toxics exposure may not be fully known until many years after initial use. As we learned from smoking-related illnesses, it is a mistake to move full steam ahead with short-term, economically driven programs without fully understanding the health and environmental consequences of our actions.

One can stop smoking and ultimately reduce their risk of developing lung cancer, though an individual cannot easily leave their environs to limit exposure to environmental carcinogens resulting from hydraulic fracturing. People also need water to survive and may not be able to avoid toxins leaching into drinking water.

The cost of health care in the United States is rising at a dramatic and alarming rate. It is then obvious that adding toxins to the environment will jeopardize the lives of millions of individuals and will further escalate health care expenditures.

Governor Corbett, it is your responsibility to protect the people of Pennsylvania. Hydraulic fracturing therefore demands a close prospective epidemiologic study. We request:

- The creation of an independent taskforce, including local and regional government officials, hydrologists, toxicologists, epidemiologists and cancer specialists.

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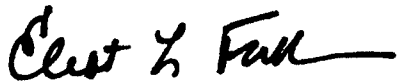
<sup>3</sup><http://www.cancer.gov/cancertopics/factsheet/Risk/benzene>

<sup>4</sup><http://www.cancer.gov/cancertopics/factsheet/Risk/acrylamide-in-food>

- This taskforce should monitor the impact of hydraulic fracturing on the environment and our health.
- This taskforce should issue an annual report documenting the toxicologic study of the water supply and the incidence of solid tumors and blood dyscrasias in the counties where this practice is ongoing or is scheduled to begin

The Pennsylvania Society of Oncology and Hematology will commit two board members to participate in this taskforce. As the health care professionals, who treat patients with cancer and blood disorders, we far too often witness the tragic effects of these dreaded diseases. We implore you to take action. You as our Governor are obliged to ensure the safety of your constituency today and prevent a potential health catastrophe in the future.

Sincerely,

A handwritten signature in black ink, appearing to read "Eliot L. Friedman". The signature is fluid and cursive, with a long horizontal stroke at the end.

Eliot L. Friedman, MD  
President, Pennsylvania Society of Oncology and Hematology