TESTIMONY OF ERIC BROWN
CONNECTICUT BUSINESS & INDUSTRY ASSOCIATION
before the
ENVIRONMENT COMMITTEE

February 28, 2014

Good afternoon. My name is Eric Brown and I serve as associate council and director of energy and environmental policy for the Connecticut Business & Industry Association (**CBIA**). CBIA represents roughly 10,000 companies throughout Connecticut and we are a strong supporter of Governor Malloy's Comprehensive Energy Strategy and its goal of making Connecticut a more competitive state by bring cheaper, cleaner and more reliable energy to our citizens.

This is one reason **CBIA strongly opposes both**:

H.B. No. 5308 (RAISED) AN ACT CONCERNING THE REGULATION OF FRACKING WASTE, which seeks to make Connecticut the first state in the country to regulate wastewater from hydraulic fracturing as hazardous waste; **and**

S.B. No. 237 (RAISED) AN ACT PROHIBITING THE STORAGE OR DISPOSAL OF FRACKING WASTE IN CONNECTICUT, which would prohibit the storage or disposal of these wastewaters in Connecticut.

Besides wastewaters, another byproduct of hydraulic fracturing is plentiful, affordable and nearby sources of natural gas. A robust portfolio of North American

fossil fuels combined with expanding development of renewable energy sources has America on the doorstep of energy independence – a scenario only dreamed about a decade ago, a scenario that will transform everything from our economy to our geopolitical and national security priorities around the world. It will make Connecticut stronger, New England stronger and our nation stronger. And it is a sad reality in our view, that this is a goal not universally supported.

We say, let's embrace this once-in-a-generation opportunity and rationally address any challenges that it presents. One of those challenges is managing wastewaters that are the byproduct of hydraulic fracturing.

There are three options for managing these wastewaters:

1. Reintroduce the wastewaters back into the ground via underground injection wells

   This technique is used extensively throughout the country. Connecticut however, has strict laws against such discharges and we would not support utilizing this management strategy in Connecticut.

2. Reduce, reuse, recycle

   States where hydraulic fracturing is occurring are working to develop best management practices for reducing the amount of fluids used in the fracturing process. And the use of on-site recycling is also on the rise. A recent study from the University of California at Berkley, recommends that California consider incentivizing recycling of these wastewaters through tax exemptions.[1] They also recommend consideration of developing a general permit for recycling and beneficial reuse in appropriate cases. If California is considering the beneficial reuse of these recycled wastewaters, why is Connecticut considering banning them?

[1] Regulation of Hydraulic Fracturing in California: A Wastewater and Water Quality Perspective, Center for Law, Energy & the Environment, University of California – Berkeley. April 2013; http://www.law.berkeley.edu/files/ccelp/Wheeler_HydraulicFracturing_April2013(1).pdf. Pg. 41.

3. Treatment and discharge

This also represents a very viable option for Connecticut and other states to effectively manage wastewater from hydraulic fracturing. To be clear, no one is suggesting these wastewaters be directly discharged to surface water or groundwater. In fact, it may well be the case that discharging untreated hydraulic fracturing wastewaters to municipal POTWs is ill-advised. However, if this proves to be the case, there is no reason pretreatment regulations could not be put in place with a special focus on limits for total dissolved solids, chlorides, barium, strontium or other materials often associated with these wastewaters.

EPA study

At the request of Congress, EPA is conducting a study to better understand any potential impacts of hydraulic fracturing on drinking water resources. The scope of the research includes the full lifespan of water in hydraulic fracturing, including extensive investigation into the life cycle of wastewaters associated with hydraulic fracturing and will also explore treatment processes used for reuse of hydraulic fracturing wastewater.

A progress report was released in December 2012 and a draft final report is expected to be released for public comment and peer review later this year.

The research is being guided by members of EPA's Hydraulic Fracturing Research Advisory Panel – a distinguished panel that includes over 30 national experts including nearly 20 of the nation's leading universities (see attached). Among the members is Dr. James Saiers - Professor of Hydrology, Associate Dean of Academic Affairs and Professor of Chemical Engineering at Yale University's School of Forestry and Environmental Studies.

Regulating as Hazardous Waste

H.B. 5308 proposes to address this challenge by labelling hydraulic fracturing wastewaters as “hazardous wastes.” CBIA believes this is ill-advised for two reasons. First what constitutes “hazardous waste” is defined in federal statute and Connecticut DEEP relies on that definition for administering the federal program in Connecticut. Having one state modify the definition would again set us apart from state’s we compete with as being more heavy-handed with respect to our regulatory climate. Equally as problematic, identifying these wastewaters as “hazardous waste”, would exponentially add to the cost of managing it. CBIA continues to urge the legislature to consider the implications of its actions with respect to the impact on our competitiveness and the implications of when we decide to be the “first in the nation” to take action, the implications of other states following our lead. For example, if New York and Pennsylvania should decide to classify these wastewaters as hazardous wastes, the cost of producing natural gas in these states would be significantly escelated – thus raising the cost of the natural gas produced in this manner – thus jeopardizing the opportunity discussed at the outset of this testimony, to reduce energy costs achieve energy independence.

Rational solution

It would appear to us that a prudent course of action for the legislature would be to instruct the Department of Energy and Environmental Protection to develop regulations and permit requirements concerning the treatment (including pretreatment), storage, recycling and reuse of hydraulic fracturing wastewaters.

It is also clear to us that taking a “knee jerk” action such as banning these wastewaters in Connecticut or simply classifying them as a hazardous waste would reflect poorly on our state - casting us as a haven for environmental extremism and as highly hypocritical with respect to our energy policy and the role of natural gas.

Therefore, CBIA strongly urges you to reject these bills and shift your attention to ensuring Connecticut develops reasonable and rational regulations for hydraulic fracturing wastewaters consistent with peer-reviewed science, such as that being conducted by the EPA.

Thank you for this opportunity to comment.

Members of EPA's Hydraulic Fracturing Research Advisory Panel

Dzombak, David A.	**Chair**	Carnegie Mellon University	Pittsburgh	PA
Almond, Stephen W.		MeadWestvaco Corporation	North Charleston	SC
Bair, E. Scott		Ohio State University	Columbus	OH
Bloomfield, Peter		North Carolina State University	Raleigh	NC
Bohlen, Steven R.		U.S. Department of Energy	Livermore	CA
Boyer, Elizabeth W.		Pennsylvania State University	University Park	PA
Brantley, Susan L.		Pennsylvania State University	University Park	PA
Bruckner, James V.		University of Georgia	Athens	GA
Davis, Thomas L.		Colorado School of Mines	Golden	CO
DeGeorge, Joseph J.		Merck Research Laboratories	West Point	PA
Ducoste, Joel		North Carolina State University	Raleigh	NC
Dunn-Norman, Shari		Missouri University of Science and Technology	Rolla	MO
Ensor, Katherine Bennett		Rice University	Houston	TX
Faustman, Elaine M.		University of Washington	Seattle	WA
Fontana, John V.		Vista GeoScience LLC	Golden	CO
Goode, Daniel J.		U.S. Geological Survey	Exton	PA
Honeyman, Bruce D.		Colorado School of Mines	Golden	CO
Hufford, Walter R.		Talisman Energy USA	Warrendale	PA
Jack, Richard F.		Thermo Fisher Scientific Corporation	San Jose	CA
Kaback, Dawn S.		AMEC Environment and Infrastructure, Inc.	Denver	CO
Li, Abby A.		Exponent Incorporated	San Francisco	CA
Malouta, Dean		Independent Consultant	Houston	TX
Miller, Cass T.		University of North Carolina	Chapel Hill	NC
Pyrak-Nolte, Laura J.		Purdue University	West Lafayette	IN
Randtke, Stephen		University of Kansas	Lawrence	KS
Ryan, Joseph N.		University of Colorado Boulder	Boulder	CO
Saiers, James E.		Yale University	New Haven	CT
Smith, Eric P.		Virginia Polytechnic Institute and State University	Blacksburg	VA
Tutuncu, Azra N.		Colorado School of Mines	Golden	CO
Westerhoff, Paul K.		Arizona State University	Tempe	AZ
Young, Thomas M.		University of California, Davis	Davis	CA