

# Regina Cornwell

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## Comment on Part 440—Hydraulic Fracturing in Shale and other Formations

In opposition to Part 440 as it stands and in support of a total ban on hydraulic fracturing (HF) of all sizes, not only high volume hydraulic fracturing (HVHF), and all related activities including wastewater processing and discharges from and water withdrawals for drilling and hydraulic fracturing operations through the Delaware River Watershed.

Below I point to some of the reasons for my opposition:

It defies logic to claim to oppose HVHF, but not to oppose all hydraulic fracturing. Both must be banned.

It further defies logic and is dangerous to ban HF without banning all produced water and wastewater from and all water withdrawals for HF operations from the Delaware River Watershed.

The Commission claims to "discourage" practices referring to transfer from the Basin "surface water, groundwater, treated wastewater or mine drainage water, at any rate or volume, for utilization in hydraulic fracturing...." But the Commission leaves wide open its willingness to approve exceptions with a docket and possible evaluation. 440.4

"Discourage" is used again, this time referring to importing produced water and wastewater (as CWT wastewater) into the Basin. But under certain conditions "at any volume or rate" it can be done with approval by the Commission given to the centralized wastewater treatment facility (CWT) operator located within the Basin. 440.5 (b) (e) (1 & 2)

For approval of the above, "therein lies the rub". Commission requires the "sponsor" involved to identify and submit a list of all of the "proposed" sources of produced water and CWT wastewater followed by one or more treatability study submitted to the Commission. The sponsor selects a professional licensed engineer in the state(s) where the CWT facilities doing the work are located. All studies are paid for by the company requesting exemption from the regulations. There are serious problems in requirements for the study which are listed in six points. 440.5 (f) (1 to 6)

First, the hydraulic fracturing and its related industries are exempt from reporting all of its chemical and other products used in HF under the protection of Confidential Business Information. (CBI) As a consequence, all of the chemicals and other substances in pollutants of concern are not available. In a study conducted by Harvard of "well-by-well fracking chemical disclosures submitted to the NGO FracFocus, between approximately March 2011 and April 2015", at least "one chemical identity" was withheld from 92 percent of the disclosures on the grounds of CBI. Today FracFocus in the largest repository of "chemical disclosure information" with data from more than 127,000 wells in the US. The EPA notes that when chemicals are claimed as CBI there is no "public" way of assessing information on them. The agency goes on to say that some chemical mixtures, disclosed or found in produced water, lack information on what affects "their movement, persistence, and toxicity in the environment should they be spilled." The Delaware Riverkeeper Network goes on to

point out how totally chancy it would be to proceed, considering public health and the environment. It adds: It also raises questions about how water treatment facilities would be able to treat fracking wastewater if neither they nor EPA know what's in it".

Save when quoting from the Part 440, the information on the Harvard Study and from the EPA is from the "Delaware Riverkeeper Network Talking Points: DRBC Frack Ban Campaign"

There is much more to be refuted from the assumptions the Commission is making about the answers it will receive from treatability studies. There is extreme danger to the quality and quantity for safe drinking water supplies when tainted by use for the HF industry. Others will point out more of the problems. Before I miss the deadline, one more point: The environment, including all of its ecosystems, the life and beauty of the Delaware River Basin and Watershed, the health of all who live near, and the water this precious river supply to 17 million or more people and to businesses, large and small, cannot be held up and destroyed by the hydraulic fracturing industry as it has done in other places in this and other regions around the country and abroad.

Please ban all hydraulic fracturing and its threats to our water for perpetuity. Please rewrite Part 440 into a Ban.

Thank you,  
Regina Cornwell