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Philadelphia Water Department  
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Philadelphia, PA 19107-2994  
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Commission Secretary  
Delaware River Basin Commission  
P.O. Box 7360  
West Trenton, NJ 08628

Re: Comments on DRBC High Volume Hydraulic Fracturing Regulations

To Whom It May Concern:

The Philadelphia Water Department (PWD) appreciates the opportunity to provide comments to the Delaware River Basin Commission (DRBC) on amendments to its Administrative Manual, Special Regulations Part 440 and supporting guidance regarding high volume hydraulic fracturing activities in the Delaware River Basin. One of the core missions of PWD is to provide safe, high quality drinking water to the 1.6 million residents of Philadelphia. This commitment to high quality drinking water starts at the source, which extends well beyond Philadelphia County boundaries to nearly 10,000 square miles of contributing watershed area. As part of a multi-barrier approach to drinking water protection, the PWD Watershed Protection Program identifies and evaluates potential risks to drinking water supply quality and quantity posed by climate, watershed activities, policy, and land use change. It is critical that any regulations related to hydraulic fracturing in the Delaware River Basin preserve the quality and quantity of the drinking water supply for current and future generations.

With these draft regulations, DRBC has taken a significant step towards protecting the drinking water supply to Philadelphia and millions of residents in the Delaware River Basin. DRBC is to be commended for including a ban on hydraulic fracturing in the draft regulations. DRBC has also taken a strong position in the draft regulations requiring any potential discharges of hydraulic fracturing flowback and wastewater to be treated so that the effluent water quality does not exceed Safe Drinking Water Act primary and secondary standards. PWD had requested alignment between effluent water quality regulations and the Safe Drinking Water Act standards in 2010 comments on prior draft DRBC hydraulic fracturing regulations. It is critical to the protection of public health that any potential discharge of hydraulic fracturing flowback and wastewater be treated to Safe Drinking Water Act standards given the presence of radionuclides, organic chemicals, brine, and other compounds that degrade source water quality.

Specific comments on proposed amendments to *Special Regulations Part 440* and *Guidance for Determining Background Concentrations in Surface Waters* are detailed below:

## **SPECIAL REGULATIONS PART 440 – HYDRAULIC FRACTURING IN SHALE AND OTHER FORMATIONS**

1. Prohibition of Hydraulic Fracturing  
PWD fully supports the ban on hydraulic fracturing in the draft regulations and commends DRBC on advancing an anti-degradation policy that protects the integrity of drinking water supplies across the region.
2. Exportation of Water  
PWD recognizes that it is the policy of the DRBC to discourage the exportation of water from the Delaware River Basin. Section 2.30 of the Water Code details the extensive application process for out-of-basin diversions and the information requested of the applicant enables DRBC to make informed water resources decisions. PWD would like to request that any out-of-basin diversion applications receive added scrutiny of the potential for impacts to streamflow and reservoir storage during drought conditions. In such cases, PWD would like to encourage DRBC to consider drought neutral alternatives such as consumptive use replacement or conditional prohibitions on out-of-basin diversions during periods of drought and seasonally low streamflow.
3. Effluent Requirements of Produced Water or Centralized Waste Treatment (18 CFR 440.5)  
PWD is strongly in favor of the requirement that potential discharges of treated hydraulic fracturing wastewater do not exceed the more stringent of either federal or state drinking water standards for inorganic chemicals, organic chemicals, disinfection byproducts and secondary standards. This regulation properly places the burden and costs of treatment on the dischargers and natural gas extraction companies who are introducing the contaminants contained in hydraulic fracturing flowback and wastewater into the drinking water supply for millions of residents in the Delaware River Basin.
4. Define Public Water Supplies  
Clarification is needed to identify which basin tributaries and reaches are a 'public water supply' or 'drinking water' as stated in 18 CFR 440.5(g). As the largest drinking water utility in the Delaware River Basin, located at the most downstream locations on the Schuylkill and Delaware Rivers, PWD recommends that DRBC define 'public water supply' as all tidal and non-tidal tributaries and the mainstem Delaware River upstream of River Mile 110 and the Schuylkill River Watershed upstream of Fairmount Dam.
5. CWT Facilities and Emergency Preparedness  
PWD requests that DRBC provide to the public the discharge dockets and locations of active CWT facilities located in public water supplies in the Delaware River Basin. PWD also requests that any hydraulic fracturing wastewater or flowback water treatability studies performed by a CWT, or other facility, are made available to all intakes downstream of the discharge location. For emergency planning and preparedness purposes it is critical that drinking water utilities, and other intakes, are aware of the constituents in hydraulic fracturing wastewater or flowback water being treated, transported to and stored at CWT facilities.

7. Delaware Valley Early Warning System

PWD requests that all entities dealing with hydraulic fracturing fluids, wastewater or solid waste in the Delaware Basin, including haulers, landfills and treatment facilities, be encouraged to join the Delaware Valley Early Warning System to support advanced notification of downstream surface water users of spills and accidents.

8. Land Application Prohibitions

PWD requests that wastewater, recovered flowback, produced waters, treated wastewater and residual solids produced from the treatment of brines may not be applied to any road or surface within the Delaware River Basin.

## **GUIDANCE FOR DETERMINING BACKGROUND CONCENTRATIONS IN SURFACE WATERS**

1. Analytical Methods for Determining Background Concentrations

PWD acknowledges that DRBC is currently developing a table with all parameters, acceptable analytical methods, method detection limits, and limits of quantification for inclusion in the guidance document. PWD requests that analytical methods and detection limits are set to those established by the USEPA under the Safe Drinking Water Act for relevant parameters and recommends that the DRBC specify laboratory accreditation requirements in its guidance.

2. Sampling Flow and Tide Conditions for Discharges to Tidal Waters of the Delaware Main Stem

PWD requests that all parameters sampled from tidal receiving waters should be performed during low streamflow conditions defined as streamflow between 3,000-9,270 CFS at Trenton. The sampling guidance makes an exception for TDS, sodium and chloride, which rather than requiring sampling during low streamflow conditions requires these parameters are sampled from the tidal Delaware River during above median streamflow conditions as measured at Trenton, NJ. Establishing background concentrations of these conservative parameters during low streamflow conditions supports maintenance of the DRBC Water Code stream quality objectives for chloride and TDS in Zone 2, and chloride, sodium, and TDS in Zone 3. To avoid the interference of oceanic salt on background concentrations of these conservative parameters during potential sampling, PWD recommends that DRBC limit sampling to non-drought conditions where streamflow at Trenton exceeds 3,000 CFS but remains below the 9,270 CFS median.

3. Background Concentration Sampling Data Availability

PWD requests that any sampling data performed to determine the background concentration of receiving waters be publicly available via the DRBC website. This sampling requirement will potentially generate a new water quality dataset that will complement existing datasets and help inform future research initiatives across the Delaware River Basin.

PWD greatly appreciates the opportunity to comment on these important regulations and applauds the continued efforts of the DRBC to properly protect and preserve the waters of the Delaware River Basin.

Sincerely,



Kelly Anderson

Watershed Protection Program Manager