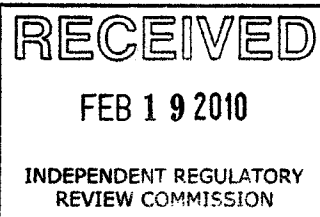


2806

February 11, 2010



Via Electronic Mail

Environmental Quality Board  
P. O. Box 8477  
Harrisburg, PA 17105-8477

**RE: Comments to Proposed Wastewater Treatment  
Regulation 39 Pa.B. 6547**

Dear Members of the Board:

This correspondence is submitted as public comment upon the proposed revisions to the Wastewater Treatment Requirements of 25 Pa. Code §95.10 which address new discharges of High-TDS Wastewater in the Commonwealth. The proposed regulation is necessary due to the onset of Marcellus Shale Natural Gas operations in multiple regions of Pennsylvania.

These comments are submitted on behalf of the DelCo Alliance for Environmental Justice, an organization which seeks to resist Environmental Racism in Chester, Pennsylvania by supporting communities threatened by energy and waste technologies & facilities which threaten environmental quality.

The Marcellus Shale Play promises to be a massive resource extraction in a relatively short period of time. There are thousands of well permits issued, and thousands more expected in the near future. Each of these drill sites may generate millions of gallons of wastewater. Most of this wastewater will be taken by truck to Publicly Owned Treatment Works or other central treatment plants, placing significant strain on many such facilities. In fact, it has been estimated that the associated wastewater needing treatment in PA will double by 2011.

DelCo Alliance has special concern for this manner of operation, as the DELCORA POTW in Chester, PA had recently nearly obtained a permit modification to allow the process and discharge of vast quantities of this toxic wastewater into the Delaware. We do not wish to see such a permit be issued, and are particularly opposed to Marcellus wastewater being processed in the absence of specific, stringent criteria adequate to preserve water quality in Pennsylvania, in the event DELCORA or other treatment facilities nearby seek to accept such wastewater streams.

Therefore, the DelCo Alliance strongly favors the Department of Environmental Protection (DEP) proposal to establish effluent limitations on Marcellus wastewater. It is crucial that this wastewater be prevented from entering surface streams, lakes and rivers, destroying ecosystems and imperiling drinking water supplies. We urge the Board to adopt meaningful limits and oversight as promptly as practicable.

The pollutant of greatest concern associated with the drilling wastewater is TDS, or Total Dissolved Solids, which is the focus of the proposed rule. TDS is comprised of "of inorganic salts, organic matter and other dissolved materials." Such substances are toxic to water bodies and the organisms therein due to higher salinity, ionic changes and introduction or creation of toxic ions.

The presence of heavy metals as a component of the TDS, such as arsenic, a human carcinogen, is also of serious concern. In addition, sulfates and calcium chloride are also present in drilling wastewater and have been found in elevated levels in some western Pennsylvania rivers and streams. Radiation, benzene, strontium, barium, and other pollutants are also found frequently in the Marcellus "flowback" water.

TDS and other pollutants from Marcellus drilling have already caused significant disruption to drinking water systems and aquatic ecosystems in the Monongahela River basin. Water quality impairments have already occurred, and we remain in the early stages of the Marcellus Play. Similar problems cannot be permitted to develop in Northeastern and Northcentral Pennsylvania.

Delco Alliance makes the following specific recommendations for the Proposed Rule.

--Given the make-up of Marcellus wastewaters, it is inadequate that the proposed regulation fails to propose limitations for carcinogenic pollutants such as arsenic, bromides, benzene, and radium. For example, radium has been found in Marcellus wastewater from Dimock, PA at levels many orders of magnitude higher than maximum contaminant levels EPA maintains for drinking water. Wastewater treatment plant effluent containing uncontrolled levels of radium may negatively impact downstream public water intakes. DEP should revise the proposal to include effluent limitations for radium and these other pollutants.

--New and Existing sources: We believe it is of great importance that all dischargers of high-TDS (and other Marcellus-associated pollutants) wastewater must become subject to these regulations. The impacts to the waters of the Commonwealth from the introduction of these toxins will be the same regardless of whether the discharge is from a "new" or "existing" source. A brief phase-in period of no more than one year might be afforded to the existing sources, to give time for them to adjust to the new requirements.

-- Applicability threshold determination: The proposed regulation is to apply only to "High-TDS wastewater discharges," with an applicability threshold at 2,000 mg/l. This concentration based limitation must be clarified as a daily average, so that it is applicable to sources expected to discharge at that concentration on any day during a given month, rather than as a monthly average.

--TDS effluent limitation: The 500 mg/l limitation proposed is the minimum stringency we would deem acceptable to protect the Commonwealth's drinking water and the aquatic ecosystems that provide so many benefits. Once again, we believe it is necessary that the limit be set as a *daily* average, rather than a monthly average. Otherwise, wastewater could be discharged at extremely high concentrations for periods of time, degrading water quality, and yet still not violate a monthly average.

--Total chlorides and total sulfates limitation: The proposed 250 mg/l for these pollutants would seem to be appropriate for the protection of water resources. However, if imposed on a monthly average basis only, degradation may occur through short bursts of highly toxic effluent, and the discharge would pass without violation. Thus, it must be clarified that the concentration-based limit be calculated as a daily average.

--Direct Discharge Ban: The Alliance supports the proposal's ban on onsite or otherwise untreated discharge. These toxic wastewaters must be taken to central treatment facilities equipped to remove pollutants sufficiently to meet all applicable limits.

--Chain-of-Custody: Marcellus wastewater is transported from well pads to treatment facilities. It is important that a method for tracking these liquid wastes be established so that no reverse incentive to proper delivery to POTWs develops. All wastewater impounded by well sites, if not lost to evaporation, must be delivered to treatment facilities for disposal, even though the Drilling companies will need to pay for the service. We urge the DEP to include requirements for the responsible companies to demonstrate proper handling of all wastewater generated.

The Clean Streams Law provides the authority and the duty for the DEP to regulate in this area. A strong regulatory package addressing this growing threat to Pennsylvania's water resources must be finalized. Therefore, we urge you to approve this rule, without concession, but only with the clarifications and additions set forth above.

The Alliance appreciates the opportunity to comment upon this critical rulemaking. This is a watershed moment for the environment in Pennsylvania; the stakes could not be higher. Future generations will look back with disbelief and disgust if we fail to protect our water resources despite having full knowledge of the likely consequences of inaction. We look forward to the Department's responses.

Sincerely,

Committee for Improved Wastewater Treatment  
DelCo Alliance for Environmental Justice  
c/o The Lang Center, Swarthmore College  
500 College Ave.  
Swarthmore, PA 19081-1390  
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FEB 19 2010

INDEPENDENT REGULATORY  
REVIEW COMMISSION

**From:** Kae Kalwaic [kaekalwaic@verizon.net]  
**Sent:** Thursday, February 11, 2010 8:13 AM  
**To:** EP, RegComments  
**Subject:** Comments to Wastewater Treatment Regulatory Proposal  
**Attachments:** Delco Alliance Comments.pdf

Attached are comments from DelCo Alliance for Environmental Justice regarding the Wastewater Treatment Regulatory Proposal.

On behalf of Committee for Improved Wasterwater Treatment,  
Kae Kalwaic