

Pamela F. Faggert
Vice President and Chief Environmental Officer

Dominion Resources Services, Inc.
5000 Dominion Boulevard, Glen Allen, Virginia 23060
Phone: 804-273-3467



February 4, 2010

Pennsylvania Environmental Quality Board
Rachel Carson State Office Building, 16th Floor
400 Market Street
Harrisburg, PA 17101-2301

RE: Proposed Rulemaking [25 PA. CODE CH.95] Wastewater Treatment Requirements [39 Pa.B. 6467] Saturday, November 7, 2009.

Dear Members of the Board:

Dominion is submitting these comments in reference to the Pennsylvania Environmental Quality Board's proposed amendments to 25 Pa.Code, Chapter 95 relating to Wastewater Treatment Requirements. The proposed amendments would establish new effluent standards for sources of wastewaters containing high Total Dissolved Solids (TDS) concentrations. Dominion owns and operates extensive natural gas exploration and production and natural gas underground storage assets in Pennsylvania that would be significantly impacted by these requirements.

While Dominion strongly supports protection of drinking water supplies in the Commonwealth, we urge the Board to take a more comprehensive and scientifically valid approach. Currently, the standard for Total Dissolved Solids in Pennsylvania reflects the federal secondary drinking water standard. This standard is an in-stream standard intended to protect a specific designated water use. Extension of this standard to end-of-pipe discharges and to all streams is not necessary to protect the environment nor is it economically viable. Promulgation of this standard will have broad implications throughout the natural gas industry, an industry of vital importance to Pennsylvania's economy.

We strongly support the Water Resources Advisory Committee's recommendation that was made at a special meeting held on June 19, 2009. This recommendation called for the Department to work in conjunction with the WRAC to form a statewide stakeholders group to analyze the issues and to develop appropriate solutions, in lieu of proceeding with the currently proposed rulemaking.

The Department's own data (DEP Water Quality Network Data (1972-2009)) does not support the need for more stringent regulation of Total Dissolved Solids. While this data indicates that there have been periodic spikes in TDS concentrations in all of the nine major rivers across the state over the past thirty years; the concentrations over the past five years (during the development of the Marcellus natural gas reserves) have not been extraordinary in any way. Further evaluation of the condition of the receiving streams and the nature and extent of high

TDS discharges is needed to understand if there are impacts to drinking water sources that have not previously existed. It is notable that the Department is proposing that these rules not apply to Abandoned Mine Drainage (AMD). We would offer that in order to effectively regulate TDS in surface waters of the Commonwealth, the final approach must include all sources, evaluating the respective contribution of sources as well as their treatment options and impacts. Focusing the rule on one industrial sector without looking at the larger picture will likely not achieve any meaningful improvement in water quality.

If it is determined that further regulation of high TDS wastewater is warranted, then the entire cycle of the waste stream from generation to disposal must be evaluated to develop an effective approach that will address the issue without creating unintended impacts. The volume of water generated by the Marcellus shale gas development is being effectively managed by efforts to recycle and reuse waste water and using existing water treatment facilities to treat this water. These practices need to be encouraged by changes to the residual waste regulations and by working with the industry and treatment facilities to develop strategies to manage the waste stream, not by mandating a mid-stream outcome by way of an effluent standard. The multi-media impacts of the treatment technologies needed to achieve compliance with the proposed end-of-pipe effluent standard, i.e. the impacts on energy consumption, air emissions, residual waste generation and disposal, have not been fully considered in this proposal. Furthermore, the proposed timeframe for compliance does not allow adequate time for either the natural gas producers or the wastewater treatment facilities to modify or construct treatment facilities to achieve these standards.

As proposed, the economic impacts on the development of the Marcellus Shale and other affected sectors of Pennsylvania's economy cannot be overstated. Additionally, there would be a significant impact to the production cost of existing wells, making many unprofitable. These wells would be candidates for plugging; this loss in natural gas production is estimated to approach several billion cubic feet.

We urge the Board to work with the regulated community and treatment facilities to fully understand the nature and extent of high TDS waste streams and to evaluate management alternatives that will protect the drinking water of the Commonwealth. Should the Board undertake to move this proposal forward, we offer the following specific comments on the proposed rulemaking:

End-of-Pipe Limits Are Not Justified. The proposed limits are unjustified for end-of-pipe discharges and assume that the water use designation for all streams is drinking water and that there is no remaining assimilation capacity at any time of year. While we acknowledge the need to protect sources of drinking water, there are alternative means of achieving this goal that would involve managing the water withdrawals and discharges to support the designated uses of the stream rather than the broad brush approach of mandating effluent limits for all discharges. The impacts of the draft regulations are wide ranging and have not been adequately analyzed by the Department. For example, the proposed definition of high TDS wastewater could also include

water from power plant flue gas desulfurization (FGD) waste storage areas which are authorized by existing NPDES permits. These discharges should be specifically exempted in the same way that Abandoned Mine Drainage (AMD) discharges have been exempted. These discharges are typically small volume discharges that are already appropriately authorized by facility NPDES permits.

Clarify “New” and “Expanded” Discharges. The proposed rules are applicable to “new discharges” of high TDS wastewater that did not exist on April 1, 2009 making it appear that the limits would apply retroactively from the adoption date back to the project beginning date for projects started between April 1, 2009 and the date of adoption. This is unfair and burdensome. It is also unclear from this definition what constitutes a “new discharge” in light of the requirement that treated discharges of wastewater generated from fracturing, production, field exploration, drilling, or well completion must be authorized by an NPDES permit and shall only be authorized from centralized waste treatment facilities (CTW) and approved Publicly Owned Treatment Works (POTW). Dominion currently owns and operates a permitted treatment facility in Henderson Township, Jefferson County, PA. This facility treats wastewater generated by the operation of storage wells, which are used to pump natural gas out of underground storage locations for delivery to consumers, and operation of established production wells. It is unclear from the definition if facilities such as this would constitute a “new discharge” when receiving water possibly generated by new storage or production wells or if the “new discharge” refers to the type of wastewater being treated and discharged by a particular CTW or POTW. In other words, if a permitted treatment facility is already treating high TDS wastewater does their continued treatment of this wastewater type constitute a “new discharge” when it comes from a different source? Should Dominion no longer be able to use this facility for water treatment, it would negatively impact our ability to take natural gas out of storage pools for delivery to the consumer.

The definition of “new discharge” also includes an additional discharge, expanded discharge, or an increased discharge from a facility in existence prior to April 1, 2009. Again, based on the requirement that discharges only be authorized from CTWs and POTW’s, the concepts of additional, expanded, and increased are not clear as discharges from CTWs and POTWs would occur from a permitted facility. It is unclear if this is intended to require CTWs and POTWs to seek permit modifications retroactively to authorized discharges that have occurred since April 1, 2009 or if this is intended to require permit modifications when CTWs and POTWs plan to accept new wastewater types for treatment.

Tiered Implementation is Needed. Tiered implementation of any standard is needed to ensure that treatment facilities have adequate time to either comply with Federal pretreatment rules or to be constructed. The proposed compliance date of January 1, 2011 is unrealistic. Construction of new treatment facilities is estimated to take up to four years to complete and bring into operation. Commitment of resources to make this type of long-term infrastructure investment is unlikely in

the current economic environment and would not readily be undertaken by private investors with no clear permitting path to bring such a facility into service.

Compliance with Federal pretreatment rules would require localities that operate POTWs to adopt local ordinances to regulate discharges of high TDS wastewater to the POTW. Even for existing treatment facilities, this process would be expected to take up to a year to accomplish. In order to facilitate this process, we suggest that the Department develop a model ordinance in cooperation with stakeholders to ensure that this waste stream is consistently managed through the Commonwealth.

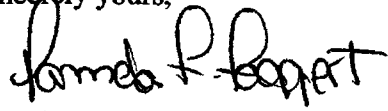
Comprehensive Evaluation of Treatment Technologies is Needed. Technologies that effectively treat TDS, namely reverse osmosis and distillation, are very energy intensive creating increased air emissions. In addition, these technologies generate waste streams that have even higher TDS concentrations. This high TDS waste stream will need to be disposed of in an environmentally acceptable manner. Since TDS is not effectively treated by biological processes, the physical separation of TDS by reverse osmosis or distillation are the only processes that we are aware of that will result in a lower concentration of TDS in an effluent. Both of these processes, however, will generate a very high concentration waste although lower volume waste that will need to be disposed of. A full evaluation of all treatment options is needed.

Concept of Net Limits Needs to be Included. The concept of net limits needs to be included in the final rule to ensure that discharges of once-through cooling water at power stations and other large industrial facilities are not inadvertently regulated due to high TDS in the intake water. Although these scenarios should be limited based on the concentration and loading in the definition of high TDS, it is feasible that large industrial facilities and electrical power stations having once-through cooling water flows in excess of 25 million gallons per day could exceed the 100,000 pounds TDS per day threshold for a high TDS wastewater, if the TDS concentration of the intake water is at or greater than 500 mg/L.

We appreciate this opportunity to provide comments on these proposed effluent standards which will have a significant impact on our businesses in the Commonwealth. Again, we strongly support the Water Resources Advisory Committee's June 19, 2009 recommendation that the Department work together with the WRAC to form a statewide stakeholders group to analyze the issues and develop appropriate solutions, in lieu of proceeding with the currently proposed rulemaking.

Should you have any questions regarding these comments please contact Roberta Jackson at 304.627.3562 or at roberta.j.jackson@dom.com.

Sincerely yours,

A handwritten signature in black ink that reads "Pamela F. Faggert". The signature is written in a cursive style with a large initial "P" and a distinct "F" and "Faggert" ending.

Pamela F. Faggert

FEB 4 - 2010

From: Roberta J Jackson [roberta.j.jackson@dom.com]
Sent: Thursday, February 04, 2010 9:58 AM
To: EP, RegComments
Subject: FW: Comments: Proposed Rulemaking [25 PA. CODE CH.95] Wastewater Treatment Requirements [39 Pa.B. 6467]
Attachments: TDS Comments_Final.pdf

INDEPENDENT REGULATORY
REVIEW COMMISSION

Resubmittal

From: Roberta J Jackson (Services - 6)
Sent: Wednesday, February 03, 2010 8:52 AM
To: 'RegComments@dep.state.pa.us'
Subject: Comments: Proposed Rulemaking [25 PA. CODE CH.95] Wastewater Treatment Requirements [39 Pa.B. 6467]

Please find attached comments on the proposed rulemaking concerning wastewater treatment requirements for high Total Dissolved Solids Wastewater. Please contact me at the numbers below should you have any questions.

Thank you,
Roberta Jackson

Roberta J. Jackson, P.E.
Manager - Environmental Regulation
Dominion Resources
500 Davisson Run Road
Clarksburg, WV 26301

304.627.3562 (office)
304.203.0381 (cell)

CONFIDENTIALITY NOTICE: This electronic message contains information which may be legally confidential and or privileged and does not in any case represent a firm ENERGY COMMODITY bid or offer relating thereto which binds the sender without an additional express written confirmation to that effect. The information is intended solely for the individual or entity named above and access by anyone else is unauthorized. If you are not the intended recipient, any disclosure, copying, distribution, or use of the contents of this information is prohibited and may be unlawful. If you have received this electronic transmission in error, please reply immediately to the sender that you have received the message in error, and delete it. Thank you.