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INDEPENDENT REGULATORY REVIEW COMMISSION

333 MARKET STREET, 14TH FLOOR, HARRISBURG, PA 17101

March 15, 2010

Honorable John Hanger, Chairman
Environmental Quality Board
Rachel Carson State Office Building
400 Market Street, 16th Floor
Harrisburg, PA 17101

Re: Regulation #7-446 (IRRC #2806)
Environmental Quality Board
Wastewater Treatment Requirements

Dear Chairman Hanger:

Enclosed are the Commission's comments for consideration when you prepare the final version of this regulation. These comments are not a formal approval or disapproval of the regulation. However, they specify the regulatory review criteria that have not been met.

The comments will be available on our website at www.irrc.state.pa.us. If you would like to discuss them, please contact me.

Sincerely,

Kim Kaufman
Executive Director

wbg

Enclosure

cc: Honorable Mary Jo White, Majority Chairman, Senate Environmental Resources and Energy Committee
Honorable Raphael J. Musto, Minority Chairman, Senate Environmental Resources and Energy Committee
Honorable Camille George, Majority Chairman, House Environmental Resources and Energy Committee
Honorable Scott E. Hutchinson, Minority Chairman, House Environmental Resources and Energy Committee
Robert A. Mulle, Esq., Office of Attorney General
Andrew Clark, Esq., Office of General Counsel

Comments of the Independent Regulatory Review Commission



Environmental Quality Board Regulation #7-446 (IRRC #2806)

Wastewater Treatment Requirements

March 15, 2010

We submit for your consideration the following comments on the proposed rulemaking published in the November 7, 2009 *Pennsylvania Bulletin*. Our comments are based on criteria in Section 5.2 of the Regulatory Review Act (Act) (71 P.S. § 745.5b). Section 5.1(a) of the Regulatory Review Act (71 P.S. § 745.5a(a)) directs the Environmental Quality Board (EQB) to respond to all comments received from us or any other source.

Section 95.10. Effluent standards for new discharges of wastewaters containing high Total Dissolved Solids (TDSs) concentrations.

This proposed regulation consists of amendments to an existing section and the addition of the new Section 95.10 on total dissolved solids (TDSs), which contains four subsections. Instead of focusing on individual subsections, the following paragraphs will identify issues, questions and concerns based on specific criteria in the Act.

Economic or fiscal impacts of the regulation (71 P.S. § 745.5b(b)(1))

Several commentators have expressed serious concerns regarding the costs imposed by this proposed regulation. Compliance with the proposed regulation will require a significant investment in upfront capital costs for new technology and equipment. In addition, there will be significant ongoing operation and maintenance costs as well as treatment, transportation and disposal costs for residual wastes produced via TDS treatment processes.

For example, the Pennsylvania Coal Association (PCA) provided estimates for the bituminous coal mining industry. For this industry in Pennsylvania, the PCA estimates that capital costs would be \$1.325 billion and the annual operation and maintenance costs would be approximately \$133 million. These estimates do not include other costs such as land acquisition, site development and utility extensions.

Another example was provided by the Electric Power Generation Association included the following figures in its comments:

Recent estimates developed for treatment of wastewater from power plant air pollution control equipment exceeded \$60 million in construction costs, over \$6 million dollars in annual operation and maintenance costs, consumed over 50,000 cubic yards of landfill space per year and consumed all of the 400 gpm of wastewater flow. This example of evaporative technologies also will require 4,000 kilowatt hours to operate, or up to 35 million kilowatt hours of electric energy per year.

A variety of other organizations from the private and public sectors raised similar concerns regarding costs.

In contrast to the potential costs of compliance, the EQB provides no detailed information regarding the potential benefits of the proposed regulation. In addition, neither the Preamble nor Regulatory Analysis Form (RAF) provides any background information on how the EQB and Department of Environmental Protection (DEP) developed their estimates for the costs of this proposed regulation.

Section 5(a)(5) of the Clean Streams Law requires that when the EQB adopts regulations, it must consider “the immediate and long-range economic impact upon the Commonwealth and its citizens.” See 35 P.S. § 691.5(a)(5). The EQB needs to demonstrate that it fully considered the potential costs of complying with the regulation. The EQB should submit a detailed fiscal impact study with the final-form regulation.

Adverse effects on prices of goods and services, productivity or competition (71 P.S. § 745.5b(b)(1)(ii))

On page seven of the RAF, the EQB’s response to questions about other states and competition focused on “gas drilling operations.” The Pennsylvania Chemical Industry Council and other commentators are concerned about the ability of different industries to compete with similar operations in other states. They indicate that the proposed regulation will put them at a serious disadvantage because competitors in neighboring states will not be required to comply with similar TDS requirements by state or federal regulation.

Based on the correspondence received, a wide variety of industries and businesses could be subject to the requirements of this proposed regulation. Many have competitors in neighboring states. Others have plants and facilities in other states and may shift operations to other states where compliance costs would be less. The EQB needs to give serious consideration to whether the proposed regulation will have adverse impacts on businesses, industries and

the economy in Pennsylvania. The EQB should report its detailed findings on this issue with its final-form submittal.

Protection of the public health, safety and welfare and the effect on this Commonwealth's natural resources (71 P.S. § 745.5b(b)(2))

The Preamble refers to the potentially detrimental impact of TDS on aquatic life and drinking water, and bromide concentrations and risks of bladder cancer. However, page three of the DEP's "Permitting Strategy for High Total Dissolved Solids (TDS) Wastewater Discharges" (April 11, 2009), includes the following statements:

In addition to protection of aquatic life uses, TDS and chlorides are secondary contaminants under Pennsylvania's safe drinking water program. Adverse affects (sic) of secondary contaminants are usually related to taste and odor. Although water with TDS and chloride levels greater than the standards may have the potential to cause health affects, no reliable data exist currently that support this and no health-based (primary contaminant) standard will be proposed at this time.

See link at:

[http://files.dep.state.pa.us/Water/Wastewater%20Management/WastewaterPortalFiles/MarcellusShaleWastewaterPartnership/high tds wastewater strategy_041109.pdf](http://files.dep.state.pa.us/Water/Wastewater%20Management/WastewaterPortalFiles/MarcellusShaleWastewaterPartnership/high%20tds%20wastewater%20strategy_041109.pdf)

Given the admission of "no reliable data," there is confusion and considerable uncertainty as to whether this proposed regulation will create any benefits related to public health and safety. In contrast, commentators indicate that compliance with the regulation may have detrimental impacts on our natural resources and public health.

The technology for treating TDS requires significant amounts of electricity or natural gas. The use of these energy resources will lead to increased production of air pollution and "greenhouse gases." In addition, TDS treatment processes produce large amounts of wastes that must be transported for disposal. This is more energy consumption with adverse impacts on the environment. Do the benefits of TDS treatment outweigh its potential impact on air quality and public health? The EQB needs to explain the need for and benefits derived from reducing TDS in discharges.

On the question of protecting the quality of drinking water, commentators point to evidence that the situation on the Monongahela River has improved, and have not found any substantive records of public water supply systems experiencing serious problems with TDS. The EQB needs to document the extent and severity of the problem before imposing a new and potentially costly

regulation on the businesses and industries of Pennsylvania. This documentation should be included when the final-form regulation is submitted.

Clarity, feasibility and reasonableness of the regulation (71 P.S. § 745.5b(b)(3))

Several commentators expressed concerns with the language used in the proposed regulation. For example, Section 95.10(a) includes this statement: “The term ‘new discharge’ includes an additional discharge, an expanded discharge or an increased discharge from a facility in existence prior to April 1, 2009.”

Commentators are uncertain what will be included as “an additional discharge, an expanded discharge or an increased discharge” and when they will be required to comply. One example of confusion includes drainage from old coal mining areas. Companies that might be interested in reclamation projects in these areas may be deterred from investing in such projects if there is a likelihood that any temporary additional discharge they may cause will need to be treated for TDS as required by this regulation. If, as commentators claim, existing drainage from abandoned mines is a major factor in elevated TDS levels in Pennsylvania streams, any hindrance of reclamation by this regulation might prolong the problem rather than solve it. This subsection needs to be revised in the final-form regulation to clearly establish the EQB’s intent.

Another concern is that this regulation will become effective upon publication as a final rule in the *Pennsylvania Bulletin*. In the Preamble, the EQB states that its goal is to implement these requirements in January 2011. Several commentators questioned the feasibility of this deadline. They contend that many industries will need more than a few months to acquire and develop the necessary land and equipment to treat the water they discharge. In addition, commentators question the effectiveness of the available treatment technologies. They assert that additional time is needed to design and test systems in order to ascertain the most suitable and effective options for treatment. The EQB should consider providing some type of grace period to give industries more time to obtain the capital necessary to develop, design and build new treatment facilities for removing TDS from the water.

Need for the regulation (71 P.S. § 745.5b(b)(3)(iii))

Commentators, including a bipartisan group of legislators, raise concerns about the data used to justify the imposition of this proposed regulation. Some commentators provided documentation that indicates that the problems cited by DEP on the Monongahela River in 2008 may represent periodic episodes in the history of these watersheds rather than a new, significant and permanent degradation. Therefore, there are serious questions regarding the extent of any problem, and the need for this regulation.

Questions are also being raised about the actual sources of TDS problems. Overall, there are questions in two basic areas. First, do TDS pose a significant problem that needs to be addressed by a statewide regulation? Second, will the proposed regulation actually solve the problem or are there less expensive solutions, such as reclamation of abandoned mining areas, which will address actual sources of the problem? Another approach would be to study and address the unique circumstances posed by each watershed or region. The uniform standard in the proposal may not be necessary statewide. The EQB needs to review and address these questions.

On July 15, 2009, DEP's Water Resources Advisory Committee (WRAC) voted to recommend that DEP not proceed with this proposed rule and that DEP "work in conjunction with WRAC to form a statewide stakeholders group to analyze the issues and develop appropriate solutions." The Majority and Minority Chairs of the House and Senate Environmental Resources and Energy Committees submitted a joint letter, dated July 14, 2009, to the EQB and DEP recommending the use of a "stakeholder or task force approach" implemented via WRAC to develop an efficient and feasible plan for addressing TDS. A bipartisan group of Representatives, including the House Southwest Caucus, expressed similar concerns about the process in letters submitted in February 2010. DEP and EQB should work closely with WRAC and all stakeholders to resolve outstanding questions, address remaining concerns, and identify effective, efficient, feasible and economically viable solutions before submitting the final-form regulation.

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333 MARKET STREET, 14TH FLOOR, HARRISBURG, PA 17101

To: Debra L. Failor
Agency: Environmental Quality Board
Phone: 7-2814
Fax: 705-4980
Date: March 15, 2010
Pages: 7

Comments: We are submitting the Independent Regulatory Review Commission's comments on the Environmental Quality Board's regulation #7-446 (IRRC #2806). Upon receipt, please sign below and return to me immediately at our fax number 783-2664. We have sent the original through interdepartmental mail. You should expect delivery in a few days. Thank you.

Accepted by: Debra L. Failor Date: 3/15/10