

Final Rulemaking

25 PA CODE
CHAPTER 95

WASTEWATER TREATMENT
REQUIREMENTS

Environmental Quality Board Meeting

Harrisburg, PA

May 17, 2010



Chapter 95 Final Rulemaking Overview

- Includes the elimination of a redundant provision.
- Establishes new treatment requirements for new and expanding mass loadings of Total Dissolved Solids (TDS).

Public Participation

- Adopted by EQB on August 18, 2009
- Proposed rulemaking was published in the *Pa. Bulletin* on November 7 and 14, 2009.
- Public comments were accepted for 90 days.
- Comment period officially closed on February 12, 2010.
- Four (4) public hearings: Cranberry Township, Butler County; Ebensburg, Cambria County; Williamsport, Lycoming County; and Allentown, Lehigh County.
- Received over 4,200 sets of written comments.

Stakeholder Participation

- Water Resources Advisory Committee (WRAC) suggested the Department examine:
 - costs of the proposed regulation on the sectors that would be impacted.
 - technologies available to treat discharges high in TDS.
- WRAC created the TDS Stakeholders Subcommittee to work on these issues.

Stakeholder Participation

- Subcommittee was made up of members of the various industries and resource protection groups.
- Met monthly from August 2009 thru March 2010.
- Sector groups presented their findings on the impact of the proposed regulations
- The Department worked closely with the Subcommittee
- Many of the recommendations were included in the final rulemaking.

The Final Rule Assures

- Waters of this Commonwealth will not approach a threshold of 500 mg/l.
- Protection of drinking water intakes on streams throughout the Commonwealth.
- Protection of aquatic life resources.
- Protection of water-related recreation.
- Continued economic viability of the existing industries and other water users.

New Treatment Requirements for TDS

- New effluent standards for TDS for “new and expanding” loadings.
- Discharge loads of TDS authorized prior to the effective date of this regulation are exempt.
- Only an increase in net TDS load is considered to be a new or expanding discharge loading.

Oil & Gas Sector Application

- Wastewaters are of much higher concentrations and loadings.
- Treatment technologies are currently available.
- Few other states allow the discharge of these treated wastewaters to their surface waters.
- Expansion into the Marcellus Shale could place existing industries at an economic disadvantage.
- Options exist for other disposal pathways, including non-discharge options.

Oil & Gas Sector Application

➤ Effluent Standards:

- 500 mg/l of total dissolved solids as a monthly average.
- 250 mg/l of total chlorides as a monthly average.
- 10 mg/l of total barium as a monthly average.
- 10 mg/l of total strontium as a monthly average.

Other Industries

- One-size-fits-all approach is not appropriate.
- The final rule establishes an effluent standard for sectors (other than natural gas well operations) at 2,000 mg/l.
- Allows a variance from this standard under certain conditions specific to the watershed in which the discharge is located.

Other Industries

- Variances can be approved if the applicant can demonstrate the need for such a variance.
- Demonstration must be based on:
 - the character of the wastewater,
 - the availability of treatment technologies
 - the costs associated with meeting the standard.
- Such variances are not without limitations.

Other Industries

- An upper bound that limits the variance will be established based on water quality considerations.
- Must comply with existing use and criteria requirements of Chapter 93.
- Cumulative load from all sources may not exceed 75% of the water quality-based assimilative capacity at design stream flow conditions.

Outreach

- Meetings with individuals and organizations representing industrial sectors.
- A comprehensive Order accompanies the rule.
- The Department we will be developing guidance materials for regional staff and the regulated community as the rule proceeds through final promulgation.
- Training sessions for the regional staff and the regulated community will be conducted.
- Anticipate completing these tasks prior to the end of 2010.

Costs

- Existing facilities will have minimal additional costs as a result of this proposed rulemaking.
- This regulation will affect the new natural gas industry.
- The Department has met with manufacturers and vendors of technologies for treating TDS from this gas industry.
- Manufacturers have verified that the true costs for treatment of this wastewater range between \$0.12 and \$0.25 per gallon.
- The cost of wastewater treatment, when compared with estimates of the annual revenue from Marcellus Shale gas extraction, is small.

Advisory Committee

- Presented to the WRAC on April 14, 2010.
- WRAC members sought further clarification on the watershed approach, the impact on conventional gas drillers and the recycling provision within the proposed regulation.
- WRAC members noted that mandatory recycling would negatively impact both conventional and Marcellus drillers.
- That provision has been removed.
- WRAC concurred unanimously to move the revised regulation forward to the EQB.

Summary

- Promulgation and implementation of this final rule will assure that Pennsylvania's watersheds will not exceed 500 mg/l of TDS in stream, protecting aquatic life and drinking water.
- This final rule exempts many small dischargers that are not a part of the projected problem.
- The rule addresses the overwhelming public comments in support of a 500 mg/l standard for the oil and gas industry.
- The rule assures the public that the Pennsylvania Marcellus Industry will not harm our streams.
- The rule employs the watershed approach preferred by most members of industry.

Final Rulemaking Recommendation?

