

2806

Pennsylvania Coal Association

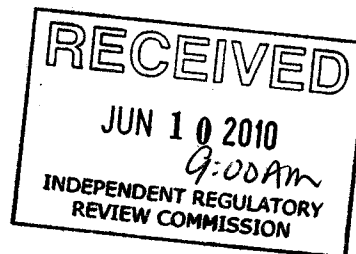
212 North Third Street • Suite 102 • Harrisburg, PA 17101

(717) 233-7900
FAX (717) 231-7610
pacoall@aol.com

George L. Ellis
President

June 10, 2010

Independent Regulatory Review Commission
333 Market Street
Harrisburg, PA 17101



RE: IRRC No. 2806 - Wastewater Treatment - Chapter 95 - TDS

Dear Commissioners:

PCA is the principal trade organization representing bituminous coal operators - underground and surface, large and small - as well as other associated companies whose businesses rely on a thriving coal economy. PCA member companies produce over 80 percent of the bituminous coal annually mined in the Commonwealth. Production of coal by PCA member companies totaled 68 million tons in 2008. Pennsylvania is the fourth leading coal producing state and its mining industry is a major source of employment and tax revenue. Latest data indicates it created 41,500 direct and indirect jobs with more than \$7 billion in economic input stimulated by the activity of the industry.

PCA has been working with the PA Department of Environmental Protection (PADEP) on this proposed rulemaking since the publishing of the *April 2009 High TDS Strategy* document in the PA Bulletin. As a stakeholder in the Water Resources Advisory Committee Chapter 95 Task Force, we spent considerable time and resources producing the *Impact Analysis of the High TDS Strategy on the Mining Industry* (September 2009)—a response to the proposed Chapter 95 rulemaking published in July 2009, specific to the bituminous coal mining industry in Pennsylvania.

We believe the rule as proposed is inconsistent and unclear and the intent as set forth in the preamble is significantly different than the regulation in Annex A. Having interacted with PADEP over the past several weeks, we are appreciative of the efforts of PADEP with respect to positive revisions. However, PCA and our member companies still have significant concern over sections of the April 30, 2010 version of the Final Rulemaking specific to the bituminous mining industry. Furthermore, we have concerns that pertain to the overall economic health of the Commonwealth as set forth below:

1. **Section 95.10, General:** The proposed rule as written is inconsistent and confusing and lacks important regulatory content. PADEP believes the intent of this proposed regulation is covered in the preamble. However, PCA is concerned as follows:

- a. Too much of the regulation in the Preamble is left to interpretation and not clearly articulated in the proposed regulation itself. Our concern stems from past experience where what was intended and what was actually in the regulation were subject to interpretation by the courts, with the court ruling that the preamble did not carry the weight of the regulation itself. We note two cases in support of our comment (see attached).
 - i. *UMCO Energy, Inc. v. Commonwealth of Pennsylvania, Department of Environmental Protection and Citizens for Pennsylvania's Future*, (2006), page 87: "We need far more than this preamble language to depart from the letter of the law itself. Preamble language has no legal effect in and of itself."
 - ii. *Tire Jockey Services, Inc. v. Commonwealth of Pennsylvania, Department of Environmental Protection*, (2002), page 32: "...the Preamble cannot overrule the actual language of the regulation."
- b. Regulatory criteria should be in the actual regulation itself and not in Technical Guidance Documents such as those currently being written by PADEP to interpret the Chapter 95 proposed rulemaking.

2. **Section 95.10(a)(1)**: The Department's April 30, 2010 version of the Final Rulemaking states the following:

Maximum daily discharge loads of TDS or specific conductivity levels that were *authorized* by the Department prior to [insert effective date of regulation]. Such discharge loads shall be considered existing mass loadings by the Department.

(emphasis added). First, because the term "authorized" is not defined, the proposed regulation is ambiguous and open to broad interpretation as to what constitutes the Department's "authorization" of a maximum daily discharge load of TDS or specific conductance. PCA suggests replacing the references to "authorization" with the following language to clearly track the Department's intention to exempt discharges from existing coal mining activities from the regulation:

"The provisions of this section 95.10 shall not apply to discharges from existing coal mining activities as defined in 25 PA Code § 86.1, or to existing coal handling facilities, coal loading facilities or coal refuse reprocessing facilities not otherwise permitted under 25 PA Code Chapters 86 and 87, where such activities or facilities were permitted prior to [insert effective date of regulation], including any subsequent permit renewals thereto."

3. **Section 95.10(a)(4)**: The Department's April 30, 2010 version of the Final Rulemaking is intended to exclude all surface mines less than 450,000 square feet of exposure from regulation under Chapter 95, but states that:

Discharges from active surface coal mining operations with an open pit dimension of less than 450,000 square feet exposed at any time.

PCA has two concerns with the language. First, while we understand that the word "active" was included in the regulation to distinguish contemporaneous surface mining operations from abandoned or inactive sites, its inclusion could be misinterpreted to limit the exemption to current mining activities only (i.e. surface mining operations existing on the effective date of the regulation) and not apply to new surface mines permitted after the effective date. To eliminate this ambiguity, we suggest that the word "active" be deleted.

Second, in describing the pit size exclusion, "footprint" is universally used and clearly understood when referring to the pit. It was inadvertently left out of the proposed regulation and should read "open pit footprint dimension" for clarity.

Accordingly, the amendment to this section should state:

"Discharges from surface coal mining operations with an open pit footprint dimension of less than 450,000 square feet exposed at any time."

4. **Section 95.10(c):** The requirement to treat wastewater to the proposed 2,000 mg/L monthly average limit for *expanding* mass loadings of TDS will create a significant problem for a number of PCA's member companies. For instance, TDS loading will likely increase over time at existing underground mines, even as coal production remains constant, because of increased pumping of water from previously unmined areas. Removing the term "expanding" from the first and last sentences of this section will clarify PADEP's stated intent that existing underground mine discharging are excluded from the regulation.

Additionally, PCA is concerned with how the maximum daily discharge loads are to be determined. As written, this seems to imply that a load greater than the current "maximum daily discharge load" authorized by the PADEP would trigger new effluent limits. The preamble itself is confusing. On page 18, the preamble refers to the use of information submitted in previous NPDES permit applications to determine maximum daily discharge load. On page 19, the preamble discusses a requirement to take new samples "during normal operations" in order to determine "average daily load." However, this is an important point of uncertainty, as the proposed regulations do not address how the maximum daily discharge load is to be calculated or whether it is a maximum daily load or an average daily load. How the discharge load will be calculated is important in our understanding of how this regulation will be implemented.

5. **Section 95.10, Generally:** As drafted, the Final Rulemaking would apply to all new underground mining activities initiated after the effective date of the regulation. PCA requested that the Department exempt new underground mining activities from the treatment requirements of the proposed Final Rulemaking.
6. **Economic and Feasibility Impacts:** PCA believes that PADEP's preamble seriously underestimates the costs of this proposed regulation and that PADEP has not evaluated all the implications of this proposed rulemaking. Because of the limited technologies available to treat TDS to the level proposed and the chemical makeup of our waste waters, the bituminous coal mining industry will need to utilize pretreatment with reverse osmosis and evaporation/crystallization. Unlike the information being fed to PADEP by equipment vendors without real-world operational knowledge for the Pennsylvania bituminous coal industry, the PCA study noted above is based on specific,

real-life mining conditions. PCA's study indicates treating the volume of water reported in our survey would cost the mining industry \$1.325 billion dollars in capital expenditures with Operation and Maintenance costs of \$133 million every year.

As a stakeholder participant in the WRAC Chapter 95 Task Force, we and other industry participants continuously raised this issue citing economic costs for every industry sector, in the billions of dollars.

PADEP appears to have ignored all the expertise from industry. Even if PADEP's \$0.25 per gallon cost were accurate, it is not uncommon for a mining facility to have discharges greater than 1,000 gallons per minute. Using PADEP's \$0.25 per gallon would equate to \$131.4 million per year in additional costs. As none of the five Appalachian coal-producing states—KY, TN, VA, WV, MD—have numeric standards for TDS, this puts the Pennsylvania coal industry at a significant competitive economic disadvantage.

PCA is also concerned that the compliance deadline is unreasonable and not achievable. One cannot just call up a vendor and order a reverse osmosis system out of their inventory. Extensive feasibility studies need to be completed prior to engineers designing the appropriate system. Some specialty steels may be required. Add in the additional time due to the flood of orders and permitting times and delays, and PCA's study projects a minimum of 3 years lead time.

7. **Section 95.10, Lack of Justification:** The information noted in the preamble, the information on PADEP's website, and the information provided to PCA are insufficient to lead PADEP to the imposition of a statewide TDS limit. Furthermore, PADEP has ignored specific data that shows there is no upward trend in TDS as follows:

- a. The West Virginia University Water Research Institute monitored and analyzed the Monongahela River at a location near Point Marion, Pennsylvania (located at Mile Point 90.8 near the border of Pennsylvania and West Virginia) from 1999 to 2006. During this period, the monitoring location showed declining trends in sulfates and TDS concentrations. No sulfate concentration was found to be over the 250 mg/l limit and only one TDS sample was greater than the 500 mg/l proposed limit (and this sample was taken during extremely low flow of the Monongahela River).
- b. Recent Consumer Confidence Reports (which every community water system is required to conduct each year and which are on PADEP's website) for community water systems utilizing the Monongahela River watershed make no mention of problems with TDS or sulfates.
- c. At the January 2010 WRAC Chapter 95 Task Force meeting, the Allegheny Conference on Community Development presented a history of TDS conditions in the Monongahela River. That data showed that while spikes in TDS values have occurred sparingly over the past 30 years, there is no pattern of an upward trend in TDS values.
- d. While PADEP has conducted minimal sampling of the Monongahela River watershed, the data and information from this sampling do not support implementation of TDS and sulfate limits on new dischargers and new sources into the Monongahela River watershed. Although sampling of the

Monongahela River was conducted by PADEP in the fall of 2009, these sampling results were subsequently changed by PADEP in January of 2010 to reflect TDS and sulfate values which were much lower.

- e. As stated on page 18 of the preamble, even PADEP itself indicates no justification for the proposed rulemaking:

"The majority of Pennsylvania's watersheds did not exhibit violations of water quality criteria, and Department analyses showed that even with these existing discharges assimilative capacity remained."

- f. Even more importantly, PADEP utilized the wrong analytical test method when evaluating the samples for TDS. Pursuant to federal regulations 40 C.F.R. § 136.3(a) and 40 C.F.R § 143.4(b), the EPA-approved sample methodologies for determining TDS concentrations are Standard Method 2540 C and USGS Method I-1750-85. Both EPA-approved methodologies require samples to be dried at a temperature of 180°C. However, PADEP used USGS Method I-1749-85, an unapproved sample methodology that requires samples to be dried at a lower temperature of 105°C.

Pursuant to the Standard Methods (20th Edition) "[t]he temperature at which the sample is dried will influence the sampling results..." Samples dried at 103° to 105°C may retain a significant portion of water, especially if sulfates are present. Further, if the TDS sample being analyzed has a high mineral concentration, it can absorb moisture and require a longer drying time to arrive at an accurate result. PADEP's data clearly indicates that its TDS samples were dried at 105°C. To the contrary, PADEP requires all NPDES permit holders to use the EPA-approved Standard Method 2540 C (with a required drying temperature of 180°C) when analyzing TDS concentrations.

Attachment A compares TDS data collected from the Monongahela River at Braddock, PA from September 4, 2009 to November 18, 2009 which shows the difference between sample results dried at 180°C versus 105°C. The five results highlighted in the Attachment A demonstrate that PADEP's I-1749-85 test methodology produced TDS concentrations above 500 mg/L while the EPA-approved Standard Method 2540 C test methodology did not. There is a risk that moisture which would have evaporated at 180°C would remain in the sample if dried only to 105°C. Incomplete drying of a sample would bias the sample results toward a TDS concentration that is higher than the TDS concentration that is actually present.

- 8. **Incomplete Analysis:** Even though the preamble and the proposed regulations focus on the oil and gas sector, this proposed rulemaking pulls in a wide range of affected industries including mining, electric power generation, pharmaceuticals, chemical manufacturing, iron and steel manufacturing, etc. In evaluating the impact of the proposed rulemaking, not only has PADEP failed to recognize the extent to which the proposed rulemaking sweeps in industries, they have failed to address other issues associated with this proposed rulemaking. Most glaring of these is the residuals issue which was brought to PADEP's attention during the numerous WRAC Chapter 95 stakeholders meetings, as well as through the

extensive public comments that were filed addressing the residuals produced by the reverse osmosis and the evaporation/crystallization process. PCA's study estimates 237,000 tons solid waste annually will be generated as a result of this proposed rulemaking, without a proven disposal location/option.

Additionally, not taken into consideration by PADEP are the increased TDS loadings due to the Chesapeake Bay TMDL limits for nitrogen and phosphorous in the Chesapeake Bay Watershed over the coming years. Many nitrogen and phosphorus treatment methods will generate increased salts as part of the treatment process resulting in increased TDS loadings. Given that PADEP's original concerns stemmed from the large number of oil/gas permit applications on the West Branch of the Susquehanna River, an analysis of all effects is required.

PCA appreciates the opportunity to supply these comments. Should you have any questions or comments, please do not hesitate to contact me.

Sincerely,

George Ellis

cc: Secretary John Hanger
Deputy Secretary John Hines
John Jewett - IRRC

ATTACHMENT A

Date	Location¹	USGS Method I- 1749-85 @ 105°C	Standard Method (18th) 2540 C @ 180°C	Difference (%)
9/4/09	Monongahela River Location No. 1	334	292	14%
9/8/09	Monongahela River Location No. 1	504	496	2%
9/14/09	Monongahela River Location No. 1	530	352	51%
9/21/09	Monongahela River Location No. 1	350	346	1%
9/28/09	Monongahela River Location No. 1	464	442	5%
10/5/09	Monongahela River Location No. 1	444	348	28%
10/14/09	Monongahela River Location No. 1	240	202	19%
10/19/09	Monongahela River Location No. 1	338	258	31%
10/26/09	Monongahela River Location No. 1	330	236	40%
9/4/09	Monongahela River Location No. 2	231	300	-23%
9/8/09	Monongahela River Location No. 2	560	420	33%
9/14/09	Monongahela River Location No. 2	478	328	46%
9/21/09	Monongahela River Location No. 2	352	328	7%
9/28/09	Monongahela River Location No. 2	338	402	-16%
10/5/09	Monongahela River Location No. 2	328	348	-6%
10/14/09	Monongahela River Location No. 2	324	384	-16%
10/19/09	Monongahela River Location No. 2	134	210	-36%
10/26/09	Monongahela River Location No. 2	290	268	8%
9/25/09	Monongahela River Location No. 3	636	388	64%
10/1/09	Monongahela River Location No. 3	636	388	64%
10/8/09	Monongahela River Location No. 3	224	184	22%
10/13/09	Monongahela River Location No. 3	488	244	100%
10/22/09	Monongahela River Location No. 3	244	284	-14%
10/27/09	Monongahela River Location No. 3	328	252	30%
11/3/09	Monongahela River Location No. 3	128	124	3%
11/12/09	Monongahela River Location No. 3	64	64	0%
11/18/09	Monongahela River Location No. 3	136	132	3%
	AVERAGE	350	297	+18%

¹ Locations Nos. 1, 2, and 3 are located approximately at RMI 86.5, RMI 88.7, and RMI 87.0, respectively.



UMCO ENERGY, INC.

v.

**COMMONWEALTH OF PENNSYLVANIA,
DEPARTMENT OF ENVIRONMENTAL
PROTECTION and CITIZENS FOR
PENNSYLVANIA'S FUTURE, Intervenor**

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EHB Docket No. 2004-245-L

Issued: September 5, 2006

ADJUDICATION

By Bernard A. Labuskes, Jr., Judge

Synopsis:

In an appeal from a Department order restricting an underground mine operator to room-and-pillar mining in one of its eleven mining panels, the Board holds that the Department has the legal authority to prohibit longwall mining in the panel where it is very likely that longwall mining will completely and permanently eliminate all flow in a perennial stream and the springs, seeps, and wetlands appurtenant to that perennial stream. The operator's commitment to perform stream flow replacement with city water from a hydrant does not prohibit the Department from issuing an order protecting the stream from permanent damage. The Board, however, reopens the record to allow the operator to present previously excluded evidence in support of its claim that it was denied equal protection vis-à-vis shopping centers and highway builders.

Procedural History

On November 12, 2004, the Department of Environmental Protection (the "Department")



entire length over the entire calendar year. (See, e.g., Brief at. 73, 77.)

UMCO's novel argument that only "large" streams are entitled to protection is based on language in the Preamble to 25 Pa. Code § 89.142a(h), which reads as follows:

The [Environmental Quality Board] believes that the current regulation in combination with the Department's technical guidance on perennial stream protection (TGD 563-2000-655) provides sufficient protection for perennial streams located above and adjacent to underground mines. Since implementing the guidance in January 1994, the Department has not encountered any situations when perennial streams have been adversely affected by diminution due to underground mining. The Board notes that the subsection applies only to larger streams which flow continuously throughout the calendar year, and that there are interests who believe that its application should be expanded to include smaller streams.

28 Pa. Bulletin 2761, 2774 (June 13, 1998) (U.Ex. 277).

We need far more than this preamble language to depart from the letter of the law itself. Preamble language has no legal effect in and of itself. 1 P.S. § 1924; *English v. Commonwealth*, 816 A.2d 382, 387 (Pa. Cmwlth. 2003). It can serve as an aid to interpretation of an ambiguous regulation, *English*, 816 A.2d at 387, but the regulations and statutes that control in this case are not ambiguous. The preamble language is unfortunate because it is, quite simply, wrong. There is no demarcation between "large" and "small" perennial streams anywhere in the law, and there never has been. There is no statute or regulation that creates such a distinction let alone defines the criteria for making such a distinction.

UMCO's argument is entirely inconsistent with the water-protection law in Pennsylvania. The Clean Streams Law contains no categorization between "large" and "small" streams. Rather, it defines "waters of the Commonwealth" to include "any and all...streams." 35 P.S. § 691.1. Water quality regulations nowhere distinguish between "large and small" streams, but instead relate to all surface waters. See, e.g., 25 Pa. Code §§ 93.1, 93.4. For example, in order



TIRE JOCKEY SERVICES, INC.

v.

**COMMONWEALTH OF PENNSYLVANIA,
DEPARTMENT OF ENVIRONMENTAL
PROTECTION**

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**EHB Docket No. 2001-155-K
(Consolidated with 2001-041-K)**

Issued: December 23, 2002

ADJUDICATION

By: Michael L. Krancer, Administrative Law Judge

Synopsis:

The Board dismisses an appeal from an order and civil penalty assessment issued to Appellant by the Department pursuant to the Solid Waste Management Act, 35 P.S. § 6018.101 *et seq.*, for operating a residual waste processing facility without a permit. The Department proved that the order was properly issued, and Appellant failed to sustain challenges to the Department's authority to issue the order. Appellant's position that all of the whole tires which would come to the site are not waste within the meaning of the Solid Waste Management Act is rejected. The civil penalty is upheld as lawful and reasonable. The Board also dismisses an appeal from the denial of an application for a determination of applicability of a general permit to Appellant's waste tire processing facility. The Department correctly determined that the application was fundamentally deficient with respect to adequate bonding. It also correctly determined that Appellant's principal had demonstrated a lack of ability or intention to comply with environmental laws and regulations as set forth in the "compliance history" provision of Section 503(c) of the Solid Waste Management Act.



Company, 791 A.2d 461, 426-67 (Pa. Cmwlth. 2002).⁷

Moreover, Tire Jockey's end-use, all inclusive, "potential to be reused or recycled" theory of the exclusion from the definition of waste as applied to tires was specifically rejected by the Commonwealth Court more than a decade ago in this language:

[Appellant] argues that the tires are not waste because they are a marketable commodity capable of being profitably recycled for various further uses. As the Board observed, the fact that the discarded tires may have value to [appellant] does not mean that they are not "waste." [Appellant's] value-based analysis falters in at least two respects. First, it ignores the express legislative policy in the Act to correct "improper and inadequate solid waste practices [which] create public health hazards, environmental pollution" 35 P.S. § 6018.102. Testimony showed that the tires pose a fire danger and harbor mosquitoes and other insects, thus constituting a public health hazard. Second, the value-based analysis ignores the absurd result that a party could escape environmental regulations by simply declaring his waste has value. Accordingly, the Board properly found that the tires on [appellant's] property were municipal waste and subject to regulation.

Starr v. DER, 607 A.2d 321, 323-24 (Pa. Cmwlth. 1992) (footnotes omitted).

The Commonwealth Court's determination that accumulated discarded whole used tires and tire derived materials are waste within the meaning of the SWMA has been reaffirmed, *see Booher v. DER*, 612 A.2d 1098, 1101-02 (Pa. Cmwlth. 1992), most recently by the Pennsylvania

⁷ Tire Jockey's reference to supposedly contradictory narrative language from the Environmental Quality Board's Preamble to this set of regulations in no way undermines our conclusion that the Department's interpretation of the regulation, nor its application to this situation, is not unreasonable. Tire Jockey points to language which states that the final form of the regulations "expand the exemptions in the definition of 'waste' to exclude, *upfront*, material reused off-site as an ingredient in manufacturing". 31 Pa. Bull 238 (Jan. 13, 2001) (Exh. P-Y) (emphasis added). Also, the Preamble provides:

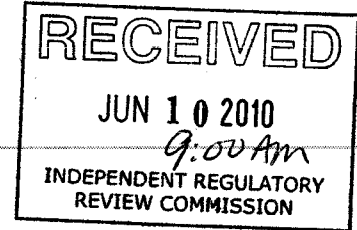
Commentators suggested that language should be added to provide for more exclusions from waste for materials such as clean fill, scrap metal, steel slag, materials for reclamation, metals, clean glass, paper, cardboard and NPDES discharges...Some commentators indicated support for the definition [of waste] since it would exclude from regulation materials that are recycled by being used or reused as an ingredient in an industrial process... The Board decided not to adopt suggested revisions. Many of the materials recommended for exclusion already are excluded if used in an industrial process to make a product or used as an effective substitute for a commercial product.

Id. at 239. Even if this language were supportive of Tire Jockey on the timing question, which is questionable, the Preamble cannot overrule the actual language of the regulation. As noted, we have reviewed and find DEP's reading thereof not unreasonable in this context. Also, the comments Tire Jockey cites talk about a material being excluded from regulation "that are recycled by being used or reused as an ingredient". That is to be distinguished from and is not the same as saying materials that *could be recycled* or that have the *potential to be recycled*.

2806

From: Jewett, John H.
Sent: Thursday, June 10, 2010 8:46 AM
To: IRRRC; Cooper, Kathy; Johnson, Leslie A. Lewis; Wilmarth, Fiona E.
Cc: Kaufman, Kim
Subject: FW: IRRRC #2806 TDS Wastewater Treatment Requirements
Attachments: IRRRC June 10 letter.doc; Preamble discussions.pdf

Please file as final comments on #2806.



From: Josie Gaskey [mailto:josie.a.gaskey@comcast.net]
Sent: Thursday, June 10, 2010 8:32 AM
To: kkaufman@ircc.state.pa.us
Cc: The Honorable John Hanger; Deputy Secretary John Hiines ; Jewett, John H.
Subject: IRRRC #2806 TDS Wastewater Treatment Requirements

The Pennsylvania Coal Association respectfully submits the attached comments regarding IRRRC #2806 TDS Wastewater Treatment Requirements.

Josie Gaskey
Director, Regulatory and Technical Affairs
Pennsylvania Coal Association
212 North Third Street
Suite 102
Harrisburg, PA 17101
717-233-7900, ext. 24
717-231-7610 fax
josie.a.gaskey@comcast.net