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From: John Baillie [baillie@pennfuture.org]
Sent: Friday, February 12, 2010 4:04 PM
To: EP, RegComments
Subject: Comments of Citizens for Pennsylvania's Future to Proposed Amendments to 25 Pa. Code Ch. 95
Attachments: Summary of PennFuture's Comments on Proposed Amendments to 25 Pa Code Ch 95.pdf;
PennFuture's Comments to Proposed Amendments to 25 Pa Code Ch 95.pdf

Dear Sir or Madam:

I have attached the Comments of Citizens for Pennsylvania's Future to the Proposed Amendments to 25 Pa. Code Ch. 95, as well as a one-page summary of those comments. A hard copy of the comments and summary will follow by U.S. Mail. Please make any response to me at the address below. Thank you for your attention to this.

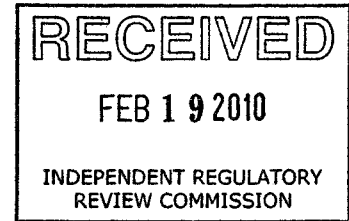
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**Summary of Comments
Of
Citizens for Pennsylvania's Future**



Proposed Amendments to 25 Pa. Code Chapter 95: "Wastewater Treatment Requirements"

- High-TDS wastewaters, largely from coal mines and gas drilling operations, threaten water quality across the Commonwealth.
- The proposed effluent standards for discharges of high-TDS wastewaters contained in 25 Pa. Code § 95.10(b) are an appropriate regulatory response to the threat of TDS pollution.
 - Existing, water-quality-based limitations on TDS do not protect against all effects of TDS pollution because they apply only at points of potable water supply withdrawal and do not consider industrial, aquatic life, and other water uses.
 - As a practical matter it is very difficult to perform modeling for point sources of TDS that is protective of all water uses because of the variety of uses and locations that must be considered, and because of uncertainties over the maximum instream levels necessary to ensure protection of each use, including uncertainties over how TDS interacts with other agents such as golden algae.
 - The proposed amendments' simple, bright-line, technology-based approach avoids the problems presented by a water-quality-based approach.
 - Control technologies that will allow dischargers to meet the proposed discharge limitations already exist and are in operation.
 - The proposed effluent standards will create incentives to develop new and less expensive treatment technologies.
- The proposed amendments at 25 Pa. Code §95.10(c)(1) and (2) make explicit an existing prohibition against discharging untreated gas drilling wastewater.
- The proposed limits on barium in treated gas drilling wastewater are adequate to protect public health and the environment.
- The proposed amendments should be extended in three ways:
 - The concept of "High-TDS Wastewater" and related applicability thresholds of TDS concentrations of 2,000 mg/L or a Loading of 100,000 pounds per day should be eliminated so that all sources of TDS are treated equally;
 - The proposed effluent standards should be applied to existing sources of TDS discharge when their NPDES permits are renewed or modified, so that existing, new, and expanded sources of TDS wastewaters are all treated equally; and
 - Because strontium seems to threaten the public health and environment only when it is present in radioactive form or in compound with chromium, the proposed effluent limitation for strontium in treated gas drilling wastewater is not necessarily protective of public health and the environment and should be replaced with effluent limitations on beta radiation and chromium.



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February 12, 2010

VIA U.S. MAIL and EMAIL (RegComments@dep.state.pa.us)

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

Re: Proposed Amendments to 25 Pa. Code Chapter 95, Establishing Standards for New and Expanded Discharges of High-TDS Wastewaters

Dear Sir or Madam:

Citizens for Pennsylvania's Future ("PennFuture") offers these comments to proposed amendments to 25 Pa. Code Chapter 95, which would (among other things) establish effluent standards for new and expanded discharges of wastewaters containing high concentrations of total dissolved solids ("TDS"). Notice of the proposed amendments to Chapter 95 was published on November 7, 2009,¹ and the Environmental Quality Board (the "EQB") is accepting comments on the proposed amendments through February 12, 2010.² These comments supplement the testimony PennFuture has presented at the public hearings on the proposed amendments.

PennFuture is a statewide, public interest, membership organization with offices in Harrisburg, Pittsburgh, Philadelphia, West Chester, and Wilkes-Barre. PennFuture's purposes include advocating and litigating state-wide on behalf of the environment and public health, including water quality issues and issues arising out of coal mining and gas drilling activities. PennFuture's membership includes residents of Pennsylvania who use the Commonwealth's rivers and streams for fishing, boating, and other forms of recreation, as well as Pennsylvanians who rely on the Commonwealth's rivers and streams as sources of drinking and household water.

PennFuture supports the EQB's proposal to amend 25 Pa. Code Chapter 95 to establish effluent standards for new and expanded discharges of high-TDS wastewaters, so that (among other limitations) such discharges will not contain more than 500 mg/L of TDS, 250 mg/L of

¹ 39 PA. BULL. 6467, 6470 (Nov. 7, 2009).

² 39 PA. BULL. 6547 (Nov. 14, 2009).

sulfates, or 250 mg/L of chlorides.³ PennFuture also supports the EQB's proposal to amend Chapter 95 to confirm explicitly that discharges of untreated gas drilling wastewater directly into streams are prohibited,⁴ and that discharges of treated gas drilling wastewater are authorized only from centralized waste treatment facilities ("CWTs") and authorized publicly-owned treatment works ("POTWs"),⁵ as well as the EQB's proposal to prohibit discharges of treated gas drilling wastewater that contains more than 10 mg/L of barium as a monthly average.⁶

However, PennFuture also urges the EQB to extend the proposed standards for new and expanded discharges of high-TDS wastewater in three ways. First, the EQB should eliminate the applicability thresholds of 2,000 milligrams of TDS per liter or a TDS loading that exceeds 100,000 pounds per day. Second, the proposed standards should be applied to all existing sources on a staggered basis as such sources seek renewal of their National Pollutant Discharge Elimination System ("NPDES") permits. Third, the EQB should replace the proposed prohibition on discharges of treated gas drilling water that contains more than 10 mg/L of strontium as a monthly average⁷ with effluent limitations for both beta radiation and chromium.

I. HIGH TDS-WASTEWATERS THREATEN WATER QUALITY ACROSS THE COMMONWEALTH

Pennsylvania's rivers and streams provide billions of dollars of direct and indirect economic benefit to the Commonwealth's families, farms, and industries. Recent developments have shown such benefits to be threatened to a greater extent now than perhaps at any time since the clean water laws were strengthened in the late 1960s in response to the then-pervasive water pollution by sewage and industrial wastewater.

The new threat comes from wastewaters from manufacturing, abandoned and active mines, and, increasingly, gas drilling operations that can produce massive amounts of wastewater with elevated TDS levels. TDS is a measure of all elements that are dissolved in water. Some level of TDS occurs naturally in all water, and stormwater runoff and agricultural, industrial, and mining activities that result in discharges to streams or rivers all contribute some amount of TDS to the receiving waters. However, unnaturally-elevated TDS levels already exist in many Pennsylvania streams, primarily as a result of pollution from a long history of mining operations, but also as a result of industrial activity and now, to a rapidly increasing degree, gas drilling activity. Thus, in Pennsylvania, the dissolved elements that cause the most concern are sulfates (which come principally from coal mine drainage) and chlorides (which are produced in tremendous quantity and high concentrations by gas drilling operations).

³ See proposed 25 Pa. Code § 95.10(b), attached as "Annex A" to 39 PA. BULL. 6467.

⁴ See proposed 25 Pa. Code § 95.10(c)(1).

⁵ See proposed 25 Pa. Code § 95.10(c)(2).

⁶ See proposed 25 Pa. Code § 95.10(c)(3).

⁷ See proposed 25 Pa. Code § 95.10(c)(4).

In late 2008, high TDS levels in the waters of the Monongahela River south of Pittsburgh threatened to shut down industries that are dependent on the river's fresh water for their operations, and affected the taste and smell of the drinking water supplied to approximately 330,000 people in the southwestern part of the state.⁸ The river was already burdened with high-TDS levels due to discharges from coal mines and industries, and became over-burdened during low-flow conditions when extremely high-TDS wastewater produced by gas drilling operations was processed (but not treated to remove TDS) and discharged by nine or more POTWs in the Monongahela River watershed.⁹ More recently, in August and September 2009, the discharge of high-TDS wastewater into Dunkard Creek, largely from coal mines in West Virginia and Pennsylvania, created conditions that virtually wiped out the stream's mussel population and caused a massive kill of fish and salamanders.¹⁰

Over the next several years, development of the natural gas-bearing shales in Pennsylvania threatens to exacerbate the problems experienced in the Monongahela River and Dunkard Creek and to extend them to other rivers and streams throughout the Commonwealth. PennFuture agrees with the conclusions of the Pennsylvania Department of Environmental Protection (the "Department") that it cannot protect the quality of Pennsylvania's rivers and streams and still approve "any significant portion of the pending proposals and applications for new sources of discharge [of] high-TDS wastewater that includes sulfates and chlorides,"¹¹ or continue to allow dilution to be used as the principal method of "treating" wastewaters containing TDS.¹²

II. THE PROPOSED EFFLUENT STANDARDS FOR DISCHARGES OF HIGH-TDS WASTEWATERS ARE AN APPROPRIATE REGULATORY RESPONSE TO THE THREAT OF POLLUTION POSED BY SUCH WASTEWATERS

A. A Water-Quality Based Approach is Not a Practical Way to Protect Against TDS Pollution; Therefore a Bright-Line, Technology-Based Approach is Required

The proposed amendments to Chapter 95 take a technology-based approach to limit the pollution caused by high-TDS wastewaters in which effluent limitations are imposed at the point of discharge regardless of the assimilative capacity of the receiving stream. The Department's technology-based approach has already received criticism from industry because it would limit

⁸ Don Hopey, *Mon River Solids are a Threat to Machinery, but not Health*, PITTSBURGH POST-GAZETTE (Nov. 17, 2008), available at <http://www.post-gazette.com/pg/08322/928571-113.stm>.

⁹ Don Hopey, *DEP Seeks Cause of River Pollution*, PITTSBURGH POST-GAZETTE (Oct. 22, 2008), available at <http://www.post-gazette.com/pg/08296/922096-100.stm?cmpid=news.xml>

¹⁰ Don Hopey, *Sudden Death of Ecosystem Ravages Long Creek*, PITTSBURGH POST-GAZETTE (Sept. 20, 2009), available at <http://www.post-gazette.com/pg/09263/999458-113.stm>.

¹¹ 39 PA. BULL. 6497 (Nov. 7, 2009).

¹² See *id.* (stating that because of "the rising levels of TDS in the waters of this Commonwealth, dilution can no longer be considered adequate treatment for high TDS wastewaters").

industry's ability to use the existing assimilative capacity of Pennsylvania's streams and rivers to dilute high-TDS wastewaters.¹³ Existing water-quality based limitations on TDS, sulfates, and chlorides are applied at points of potable water supply withdrawal and do not consider industrial,¹⁴ aquatic life,¹⁵ and other water uses. As a practical matter it is very difficult to perform modeling for point sources of TDS that is protective of all water uses because of the variety of uses and locations that must be considered, and because of uncertainties over the maximum instream levels necessary to ensure protection of each use, including uncertainties over how TDS interacts with other agents, such as golden algae.¹⁶ Given the uncertainties that a water-quality approach would leave, the Department is clearly correct to propose an easy-to-enforce, bright-line, technology-based approach for controlling TDS pollution, like the one in proposed section 95.10(b).

Further, just because Pennsylvania's streams and rivers may have some capacity to dilute high-TDS wastewaters without disrupting the streams' existing and designated uses does not require the Department to push them to the brink of such disruption by allowing their remaining assimilative capacity to be consumed. The Department is to be commended for attempting to preserve the existing assimilative capacity of Pennsylvania's streams and rivers for TDS by limiting discharges of high-TDS wastewaters and requiring new and expanded significant sources of such wastewaters to treat them before discharge.

B. Control Technologies That Allow Industry to Meet the Proposed Discharge Limitations on High-TDS Wastewater Already Exist and are Likely to be Developed Further in Response to the Limitations

There are several treatment technologies that are available and can be used to meet the proposed limitations on discharges of high-TDS wastewaters. Much of the high-TDS wastewater generated in Pennsylvania by sources other than Marcellus Shale gas extraction, including mine drainage, can be treated by reverse osmosis. Indeed, reverse osmosis is successfully used to treat high-TDS wastewater at coal mines already.¹⁷ Reverse osmosis is also used in thousands of facilities around the world to extract solids from seawater (which typically

¹³ See Statement of Paul Hart, President of Hart Resource Technologies, Inc., and Pennsylvania Brine Treatment, Inc., to the Pennsylvania Senate Environmental Resources and Energy Committee, at 2 (Jan. 27, 2010), available at <http://www.senatormjwhite.com/environmental/2010/012710/hart.pdf>.

¹⁴ See Hopey, *Mon River Solids a Threat to Machinery, but not Health*, *supra* note 8.

¹⁵ See Pamela A. Milavec, PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, *Aquatic Survey of Lower Dunkard Creek, Greene County, October-November 2008*, at 4-5 (Feb. 5, 2009) (concluding that high loads of sulfates and TDS in a four-mile-long portion of Dunkard Creek caused degradation and loss of fishery in the Creek). PennFuture will provide a copy of this report upon request.

¹⁶ Golden algae contributed to the massive fish kill that occurred in Dunkard Creek in September 2009. See Don Hopey, *EPA Pins Killing of Dunkard Creek on Mine Discharges*, PITTSBURGH POST-GAZETTE (Dec. 3, 2009), available at <http://www.post-gazette.com/pg/09337/1018118-113.stm>.

¹⁷ See, e.g., Pam Kasey, *Consol Builds Va. Plant to Remove Salts From Water; No Plans Yet for W.Va. Plant*, THE STATE JOURNAL (Jan. 10, 2010), available at <http://statejournal.com/story.cfm?func=viewstory&storyid=73461>.

has TDS levels of approximately 35,000 milligrams per liter), so that it can be used for drinking and household purposes in areas with limited access to conventional sources of fresh water.

Although reverse osmosis and other conventional treatment technologies will generally not be suitable to treat the extremely-high-TDS wastewater often produced by Marcellus Shale gas extraction, a number of Pennsylvania companies are advertising brine concentration, crystallization, vapor-compression evaporation, and other distillation technologies that the companies claim are suitable for treating or pre-treating such wastewaters at a reasonable cost.¹⁸

It also bears noting that the gas drilling industry in Pennsylvania, to its credit, has already taken some significant steps to reduce its discharges of high-TDS wastewaters by devising ways to partially-treat and recycle high-TDS drilling wastewater to reuse it as fracturing fluid in new drilling or fracturing jobs.¹⁹ It seems likely that the industry's effort to recycle water is at least in part a response to the Department's introduction of the proposed amendments to Chapter 95 in April 2009 and in anticipation of the proposed amendments being adopted as a final rule. By ensuring that the drilling industry is not able to dispose of the high-TDS wastewater except by treating it, the proposed amendments to Chapter 95 will strengthen the incentive to develop new treatment technologies and to adapt existing treatment technologies to limit discharges of TDS, and will thus help lock in the industry's efforts to use water recycling to reduce its pollution footprint. Introducing new treatment technologies to the market also should promote competition and thus reduce costs over time.

III. THE PROPOSED AMENDMENTS AT SECTION 95.10(c)(1) and (2) MAKE EXPLICIT AN EXISTING PROHIBITION AGAINST DISCHARGING GAS DRILLING WASTEWATER BEFORE IT HAS BEEN TREATED AT A PERMITTED OR AUTHORIZED FACILITY

The Oil and Gas Act²⁰ and the Oil and Gas regulations in 25 Pennsylvania Code Chapter 78 already require gas well operators to control and dispose of brines in a manner that complies with Chapters 91-93, 95 and 102 of the Pennsylvania Code and the Clean Streams Law.²¹ The Clean Streams Law generally prohibits discharges of industrial waste into the waters of the

¹⁸ For example: Aquatech International Corp., which is headquartered in Cannonsburg, and Venture Engineering & Construction, which is headquartered in Pittsburgh; *see also* Anya Litvak, *Marcellus Shale Drilling Pumps Water Business*, PITTSBURGH BUSINESS TIMES (Oct. 23, 2009) (discussing several other companies' entry into the gas drilling wastewater treatment market as suppliers), *available at* <http://pittsburgh.bizjournals.com/pittsburgh/stories/2009/10/26/story1.html>.

¹⁹ Marcellus Shale Coalition, *Marcellus Shale Coalition Releases the Facts on Flowback Water*, PR NEWswire (Feb. 4, 2010) (claiming that at least sixty percent of the water used to complete Marcellus Shale gas wells is recycled), *available at* <http://www.prnewswire.com/news-releases/marcellus-shale-coalition-releases-the-facts-on-flowback-water-treatment-83561557.html>.

²⁰ 58 P.S. § 601.101, *et seq.*

²¹ 35 P.S. § 691.1, *et seq.*

Commonwealth unless authorized or permitted by the Department.²² It is obvious that gas drilling wastewater is an “industrial waste” within the meaning of the Clean Streams Law.²³

Accordingly, Pennsylvania law already prohibits the discharge of untreated gas drilling wastewater directly into waters of the Commonwealth and therefore as a practical matter requires that such wastewater be treated at a permitted facility before being discharged. The proposed amendments to Chapter 95 at Section 95.10(c)(1) and (2) would serve to make this important prohibition and requirement absolutely clear and explicit.

IV. LIMITING THE CONCENTRATION OF BARIUM IN TREATED GAS WASTEWATER TO A MONTHLY AVERAGE OF 10 mg/L WILL PROTECT THE PUBLIC HEALTH AND ENVIRONMENT

The Department has also recognized that the trace elements barium and strontium, which are present in relatively high concentrations in much of the wastewater produced by Marcellus Shale drilling operations, might also threaten to contaminate sources of drinking water and the economic benefits that are provided by clean streams and rivers in Pennsylvania. Accordingly, the proposed amendments to Chapter 95 would limit the concentration of barium in treated gas drilling wastewater to 10 mg/L as a monthly average. Although the federal drinking water standard for barium is 2 mg/L,²⁴ according to the Agency for Toxic Substances and Disease Registry (“ATSDR”), drinking water containing a barium concentration of 10 mg/L has been shown not to have adverse health effects.²⁵ The ATSDR report does not suggest, however, that higher concentrations of barium would have similar results. Thus, while the proposed effluent limitation for barium in treated gas drilling wastewater would seem to be sufficient to protect public health and the environment, in no event should the Department relax the final limit above 10 mg/L.

V. THE PROPOSED AMENDMENTS TO CHAPTER 95 SHOULD NOT INCLUDE APPLICABILITY THRESHOLDS, SHOULD BE EXTENDED TO EXISTING DISCHARGES ON A STAGGERED BASIS, AND SHOULD REPLACE LIMITATIONS ON STRONTIUM DISCHARGES WITH LIMITATIONS ON CHROMIUM AND BETA RADIATION

PennFuture believes that by limiting the TDS levels of discharges into Pennsylvania’s rivers and streams from new and expanded sources, by limiting the levels of in discharges from

²² See 35 P.S. § 691.307(a).

²³ 35 P.S. § 691.1 (defining “industrial waste” to include any substance other than sewage produced by an industry or other establishment).

²⁴ UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, LIST OF CONTAMINANTS & THEIR MCLS, available at <http://www.epa.gov/safewater/contaminants/index.html>.

²⁵ AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY, PUBLIC HEALTH STATEMENT FOR BARIUM, § 1.5, available at <http://www.atsdr.cdc.gov/toxprofiles/phs24.html>.

treated oil and gas drilling wastewater, and by explicitly reaffirming the existing requirement that oil and gas wastewater be treated at a CWT or approved POTW, the proposed amendments to Chapter 95 will at least enable the Department to take steps to help prevent additional deterioration of streams as a result of elevated TDS concentrations. Further, the proposed effluent standards will help insure that the cost of protecting the state's streams and rivers from contamination by TDS will be borne by those who generate the contaminants rather than by those who are depend on clean water from rivers and streams for recreation, agriculture, industrial uses, or drinking water.

However, although the proposed amendments to Chapter 95 are a good starting point, additional regulation is required if Pennsylvania's rivers and streams are to be truly protected to the degree guaranteed under Pennsylvania's Clean Streams Law and the federal Clean Water Act. **The proposed effluent standards for "new discharges" of "High-TDS wastewater" should therefore be extended in three ways.**

A. The Concept of "High-TDS Wastewater" and the Related Applicability Thresholds of a TDS Concentration of 2,000 mg/L or a Loading of 100,000 Pounds Per Day Should be Eliminated

This change would be consistent with other technology-based treatment standards, which specify maximum pollutant concentrations or loadings that must be achieved regardless of the degree by which the raw wastewater would exceed those maximum limits. Thus, for example, a discharge from a surface coal mine or underground coal mine must achieve a 30-day average total iron concentration of 3.0 mg/L even if the raw wastewater contains a total iron concentration of just 4.0 mg/L.²⁶

Eliminating the concept of "high-TDS wastewater" and the related applicability thresholds also would eliminate an inconsistency that the proposed regulations would permit in their current formulation: a facility that discharges a low volume of wastewater with a TDS concentrations above 2,000 mg/L will be required to treat the discharge to the 500 mg/L level in the proposed regulations, even though the TDS load added to receiving stream might be relatively insignificant, while a facility that discharges a high volume of wastewater at a TDS concentration less than 2,000 mg/L will not be required to treat if its loading of dissolved solids is less than 100,000 pounds per day, even if its loading is considerably higher than that of the first facility. Eliminating the applicability thresholds from the proposed regulations would eliminate this anomaly.

B. The Proposed Effluent Standards Should Be Applied to Existing Sources When Their NPDES Permits are Renewed or Modified

Extending the effluent standards to existing sources will not only directly address the largest sources of TDS in the Commonwealth's rivers and streams and the principal causes of

²⁶ See 25 Pa. Code § 87.102(a); 25 Pa. Code § 89.52(c).

elevated TDS levels in the Monongahela River in 2008 and the fish kill in Dunkard Creek in 2009, but will also generally level the regulatory and economic playing fields between new and existing sources of TDS wastewater. Making all sources play by the same rules will ensure that the cost of protecting the quality of Pennsylvania's rivers and streams is not borne disproportionately by new industries and operations such as the burgeoning shale gas industry, which is expected to provide thousands of new skilled jobs and huge direct and indirect economic benefits in Pennsylvania in coming years.

Further, by extending the effluent standards to both existing and new dischargers of TDS wastewater, Pennsylvania will strengthen the demand for treatment solutions and technologies. PennFuture is confident that the market will respond with suitable, low-cost treatment solutions; because Pennsylvanians will be at the forefront of designing and implementing those solutions, the effluent standards will help position Pennsylvania to enjoy the additional job creation and other economic benefits that will come with being the leader in supplying new treatment technologies for oil and gas wastewater, both in the United States and around the world.

Phasing in the application of the new standards to existing sources at the time their NPDES permits come up for renewal will help to spread out the administrative burden on the Department. In addition, the ability to incorporate an appropriate compliance schedule into an NPDES permit gives the Department a flexible mechanism for taking into account each existing discharger's circumstances in establishing timeframes for compliance with the new limitations.²⁷

C. The Proposed Effluent Limitation for Strontium in Treated Gas Drilling Wastewater Should be Replaced With Effluent Limitations for Chromium and Beta Radiation

The proposed effluent limitation for strontium in treated gas drilling wastewater of 10 mg/L as a monthly average may not protect the public health and the environment. According to ATSDR, strontium causes deleterious health and environmental effects only when it is present as the radioactive isotope strontium-90 (in which case its deleterious health effects are caused by beta radiation) or when it is present in combination with the element chromium as the compound strontium chromate (in which case the deleterious effects are attributable to the chromium in the compound rather than the strontium).²⁸ Accordingly, the proposed amendments to Chapter 95 would better protect against the health and environmental risks posed by strontium if they directly limited the levels of beta radiation and chromium in gas drilling wastewater. PennFuture therefore suggests that the proposed amendments to Chapter 95 be revised to delete the proposed effluent limitation for strontium in treated gas wastewater and to replace it with effluent limitations for total chromium and beta radiation that match the maximum contaminant levels set

²⁷ See 25 Pa. Code § 92.55.

²⁸ AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY, PUBLIC HEALTH STATEMENT FOR STRONTIUM, § 1.5, available at <http://www.atsdr.cdc.gov/toxprofiles/phs159.html>.

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by the United States Environmental Protection Agency for safe drinking water, specifically, 0.1 mg/L chromium as a monthly average and 4 millirems/year for beta radiation.²⁹

Thank you for your consideration of these comments. PennFuture urges the EQB to revise the proposed revisions to 25 Pa. Code Chapter 95 to include the modifications suggested in Part V of this letter and to adopt the proposed revisions as modified.

Very truly yours,

/s/

John K. Baillie
Senior Attorney

²⁹ UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, LIST OF CONTAMINANTS & THEIR MCLS, available at <http://www.epa.gov/safewater/contaminants/index.html>.