#3260

Comments of Concerned Groups: PennFuture, Pennsylvania Environmental Defense Foundation, Mountain Watershed Association, Pennsylvania Fly Fishing Association, Eastern Pennsylvania Coalition for Abandoned Mine Reclamation, Stonycreek-Conemaugh Improvement Project, Center for Coalfield Justice, Pennsylvania Chapter of the Sierra Club and Mountain Laurel Chapter of Trout Unlimited on Environmental Quality Board Proposed Rulemaking Amending 25 Pa. Code Chapters 93 and 96 adopted by the Board on December 17, 2019.

Introduction and Summary

The nine-public interest, sportsmen's, environmental and conservation organizations listed above (Concerned Groups) submit the following comments on the Environmental Quality Board's (Board) Proposed Rulemaking amending 25 Pa. Code Chapters 93 and 96 adopted on December 17, 2019. The proposed rulemaking if adopted would delete manganese from Table 3 in 25 Pa. Code § 93.7 (relating to specific water quality criteria) and add manganese to Table 5 in § 93.8c (relating to human health and aquatic life criteria for toxic substances). The amendments also propose two alternatives for a point of compliance with the manganese water quality standard: the point of all existing or planned surface potable water supply withdrawals; or all surface waters (that is, near the point of discharge).

The Concerned Groups support changing the manganese criterion from 1.0 mg/l to 0.3 mg/l to fully protect the public heath of Pennsylvania's citizens and the fish and other aquatic life in the Commonwealth waters. We strongly oppose alternative language which would change the point of compliance from the point of discharge to the point at which water is taken from a stream.

Our comments focus on two aspects of the proposed rulemaking. First and foremost, the directive in Act 40 of 2017 to adopt a regulation moving the point of compliance from the point of discharge to the point at which water is taken from a stream violates the requirement in Article III, Section 3 of the Pennsylvania Constitution that bills contain no more than one subject which shall be clearly expressed in the title. The single subject requirement is violated where the legislation at issue does not possess a single unifying subject to which all the provisions of the act are relevant. *Pennsylvanians Against Gambling Expansion Fund, Inc. v. Com.*, 877 A.2d 383, 400-403 (Pa. 2005). The clear expression of title requirement is violated where the title of the act fails to put a reasonable person on notice as to the act's contents. *Id.* The Concerned Groups submit that

Act 40 fails the constitutional requirement in both respects. Act 40 also was enacted contrary to Article III, Section 1 of the Constitution which prohibits altering or amending a bill, on its passage through either House, to change its original purpose. Moreover, Act 40 also violates Article III, Section 32 of our Constitution which prohibits the passage of any special law that *inter alia* regulates mining, i.e., Act 40 is an unconstitutional special law.

Even absent the constitutional infirmities of Act 40, the act directs the Board to promulgate a regulation that violates the fundamental precept of Pennsylvania law: the prevention, reduction and treatment if necessary, of pollution entering these waters *is the responsibility of the polluter* not the public or other downstream users. However, we first will address the science supporting the 0.3 mg/l requirement and the strong reasons for leaving the point of compliance at the point of discharge.

The Concerned Groups

PennFuture is leading the transition to a clean energy economy in Pennsylvania and beyond, with a focus on protecting our air, water and land, and empowering citizens to build sustainable communities for future generations. Abigail M. Jones, Vice President of Legal and Policy is the relevant contact person.

Pennsylvania Environmental Defense Foundation (PEDF) is a not-for-profit organization dedicated to educating the citizens of Pennsylvania about state and federal environmental laws and enabling citizens to use these laws to protect and improve the environment. Ron Evans is PEDF president.

Mountain Watershed Association (MWA) works for the water and for Pennsylvania's citizens. MWA pursues on-the-ground restoration of past damage while also advocating on local, regional, and national issues that impact our waters.

Pennsylvania Fly Fishing Association's (PFFA) mission is to promote and advance fly fishing across the Keystone State. PFFA was organized to bring more individuals into fly fishing, targeting our youth, families and beginners that feel they want to experience the pleasures of fly fishing. PFFA's Executive Director is Tom Hoffmaster.

Eastern Pennsylvania Coalition for Abandoned Mine Reclamation (EPCAMR) was formed in 1995 by concerned conservation districts. EPCAMR represents a coalition of watershed organizations and reclamation partners. Members range

from individuals, to the active anthracite mining industry and co-generation power plants, to non-profit organizations, 16 county conservation districts and other organizations in the anthracite and bituminous coal region of eastern Pennsylvania that are involved with abandoned mine reclamation issues. EPCAMR seeks to encourage the reclamation and redevelopment of land affected by past mining practices. This includes reducing hazards to health and safety, eliminating soil erosion, improving water quality, and returning land affected by past mining practices to productive use, thereby improving the economy of the region. Bobby Hughes is EPCAMR Executive Director.

Stonycreek-Conemaugh Improvement Project (SCRIP) is a coalition of grass-roots groups and local resource agencies working to restore and promote the Upper Conemaugh watershed. This watershed encompasses portions of Cambria and Somerset Counties in Western Pennsylvania, a region riddled with signs of environmental degradation from past industry, particularly coal mining. Thomas J. Clark, Jr., is Chairman of the Board and Len Lichvar is Vice-Chair.

Center for Coalfield Justice's (CCJ) mission is to improve policy and regulations for the oversight of fossil fuel extraction and use; to educate, empower and organize coalfield residents; and to protect public and environmental health.

Pennsylvania Chapter of the Sierra Club is the only member-led statewide environmental organization in Pennsylvania and believes our open spaces, clean water, and natural resources should be protected so that current and future generations may enjoy them. In addition to our offices in Pittsburgh, Harrisburg, and Philadelphia, we have nine active regional groups all across the state that help us explore, enjoy, and protect our state's many environmental resources and fight for safe and livable communities.

Mountain Laurel Chapter of Trout Unlimited is headquartered in Johnstown and serves Cambria, Somerset & Bedford Counties in Southwestern Pennsylvania. We work with watershed organizations such as SCRIP and nonprofit organizations such as the Southern Alleghenies Conservancy. The Mt. Laurel Chapter focuses on mine drainage pollution and non-point source pollution such as uncontrolled storm water runoff and sedimentation.

The Science

The primary purpose of setting water quality criteria and standards is to protect sensitive populations of animals which use water for drinking or other life support

functions. While 25 Pa. Code Chapter 93 § 93.3 and § 93.4 contain many statewide and specific protected uses, water quality protection limits are typically developed to protect human health or fish and other aquatic life since these are the most common endpoints which represent the sensitive uses. There are times when human health criteria are more restrictive than aquatic life criteria, but many times fish and aquatic life are more sensitive to chemical pollutants than humans. In fact, most of the criteria listed in Table 3 of 25 Pa. Code § 93.7 (Specific water quality criteria) have aquatic life listed as the critical use.
All chemicals can pose a potential threat to human health or aquatic life. Toxicity depends upon two things-- the concentration of the substance in water and the duration of exposure. Higher concentrations of toxic substances produce acute toxicity which essentially means that these exposures can produce mortality of the organism relatively quickly. On the other hand, smaller doses of the same chemicals tested over a longer duration of exposure can be lethal too. Therefore, many chemicals which have been tested to determine their ultimate toxicity on fish and other aquatic life have both acute (short-term) and chronic (long-term) protection limits. See 25 Pa. Code § 93.8b (Metals criteria) and § 93.8c (Human health and aquatic life criteria for toxic substances) for examples.

Manganese comprises about 1000 ppm (0.1%) of the Earth's crust and is the 12th most abundant of the crust's elements. It is often found in minerals in combination with iron. Soil contains 7–9000 ppm of manganese with an average of 440 ppm. While the element is a required trace mineral for all known living organisms, it also acts as a neurotoxin in larger amounts. Waterborne manganese has a greater bioavailability than dietary manganese. According to results from a 2010 study, higher levels of exposure to manganese in drinking water are associated with increased intellectual impairment and reduced intelligence quotients in school-age children () (Bouchard et al. 2011).

Manganese currently is listed in 25 Pa. Code § 93.7 (Specific water quality criteria) with a protection limit of Maximum 1.0 mg/l, as total recoverable for the protection of public water supply uses. This criterion has been used in regulating industrial waste discharges into Commonwealth waters for decades. Although the criterion is used to protect public health, it is also regarded as protective of aquatic life uses based upon the historical information reported in the scientific literature. The 1.0 mg/l water quality protection limit in 25 Pa. Code Chapter 93 in concert with the technology-based limits in 25 Pa. Code Chapter 87 § 87.102 (surface mining) and Chapter 89 § 89.52 (underground mining) regulations "manganese (total) 2.0 mg/l (39 day average) 4.0 mg/l (daily maximum) 5.0 mg/l (instantaneous maximum)" and the antidegradation requirements in Chapter 93 § 93.4a were

protective of all uses downstream of discharges throughout the Commonwealth with some exceptions.

One notable exception was a coal mine located in Lycoming County on Otter Run, a tributary to Little Pine Creek upstream of Little Pine State Park. Although manganese is usually associated with iron (the fourth most common element in the earth's crust) in the geology surrounding most Pennsylvania coal seams, and the bright orange ferric hydroxide precipitate masks the dark black coloration of manganese oxide precipitates, the drainage from this mine site contained high concentrations of manganese which stained the substrate (rocks) on the streambed black and negatively impacted the fish and aquatic life populations of this high quality trout stream. The site was extensively investigated in the 1980's by the Department of Environmental Resources and the Pennsylvania Fish and Boat Commission and although many innovative attempts were made to control the manganese discharges, none proved successful.

The Environmental Quality Board proposed a new numeric human health criterion for manganese of 0.3 mg/l in Chapter 93.8 - Water Quality Criteria for Toxic Substances and would delete the existing 1 mg/l standard because it is not protective of human health. (50 Pa. B. 3724 Water Quality Standard for Manganese and Implementation). The science is clear that the old standard is not protective of human health and a new standard is necessary.

Aneca Atkinson, Deputy Secretary for Water Programs at the Department of Environmental Protection (DEP), testified before the Senate Environmental Resources Committee that DEP reviewed over 60 peer-reviewed human health studies specific to the neurotoxicological effects of manganese, with the majority of these studies having been published within the last 15 years. She stated:

> While manganese is an essential dietary component, there can be significant variation in exposure levels and pathways and other factors which may result in the body absorbing and retaining more manganese than is necessary to maintain adequate health.
>
> When this occurs, manganese may build up in the body to toxic levels that result in adverse health effects.
>
> Many of the recent studies indicate that, during the fetal and childhood life stages, when manganese levels in the body are above those levels necessary to maintain adequate health, manganese has the

> potential to significantly and irreversibly affect a child's developing brain.
>
> It is important to note that infants represent a sensitive subpopulation due to the unique characteristics of this life stage.

Public health science thus supports changing the current outdated 1.0 mg/l manganese criterion in 25 Pa. Code § 93.7 (Specific water quality criteria) and replacing it with the proposed 0.3 mg/L in Chapter 93.8 - Water Quality Criteria For Toxic Substances, because the existing 1 mg/L standard is not protective of human health. This change is fully supported and based upon sound science to protect the public health of the Commonwealth's citizens. This change also would apply at the discharge point which would protect other sensitive uses, such as fish and aquatic life and recreation.

However, the proposed regulation in 50 Pa. B. 3724, also proposes alternative language for public comment which would change the point of compliance from the discharge point to the point at which water is taken from a stream by a public water supplier. This proposed change is most troubling since it would allow for the unregulated discharge of manganese in Commonwealth waters after the point of discharge until it reaches a public water supply intake.

In 2019, there were one-thousand nine-hundred fifty-one (1951) Community Water Systems, one-thousand ninety-eight (1098) Non-transient Noncommunity Water Systems, and five-thousand two-hundred forty-eight (5248) Transient Noncommunity Water Systems throughout the Commonwealth. However, eleven (11) percent of Pennsylvania's population is served by individual wells. (http://files.dep.state.pa.us/Water/BSDW/DrinkingWaterManagement/PublicDrinkingWater/PA_DEP_2019_Annual_Compliance_Report.pdf) Would the change in compliance point for manganese prevent the enforcement of manganese pollution in individual wells?

Deputy Secretary Atkinson told the Committee--

> The first alternative, consistent with Act 40 [of 2017], is to move the point of compliance from the point of discharge – which means the criterion must be met in all surface waters – to the point of any existing or planned surface potable water supply withdrawals – which means the criterion would only need to be met at the locations of those drinking water supply intakes.

> If the point of compliance were moved to the point of any potable water supply withdrawal, the criterion would not apply and may not protect other water uses between a discharge location and a downstream drinking water intake.
>
> The second alternative is to maintain the existing point of compliance in all surface waters (that is, at the point of discharge).
>
> This point of compliance will protect all water uses, including municipal, industrial, and agricultural water supplies, and recreational and aquatic life uses, between the point of discharge and the point of a downstream drinking water intake.
>
> This point of compliance is consistent with the previously mentioned statutory obligations of the Department and the Board under Pennsylvania's Clean Streams Law, Safe Drinking Water Act, and the Federal Clean Water Act.
>
> In particular, this point of compliance is mindful of the responsibilities of drinking water suppliers to meet the manganese SMCL under Pennsylvania's Safe Drinking Water Act."

We partially concur with Deputy Secretary Atkinson's conclusions about the lack of protection for critical uses between the point of discharge and the point of public water supply intake. However, the science supports the fact that there **will be** impacts to fish, aquatic life, and recreational uses **if** manganese is allowed to be unregulated in waters between the point of discharge and PWS intake. Should the Board change the point of compliance, DEP staff should conduct a comprehensive risk assessment (similar to the public health risk assessment that was done to change the protection criterion PA DEP 2019 http://files.dep.state.pa.us/PublicParticipation/Advisory%20Committees/AdvCommPortalFiles/WRAC/2019/072519/Managanese07.25.19.pdf)) based upon the most current literature available on the toxicity of manganese to fish and aquatic life and the nuisance impacts of manganese precipitates to recreational activities downstream of these unregulated discharges. This is extremely important since this regulatory change would place thousands of miles of headwater streams and the aquatic life they support at risk. There is not only a legal obligation required by The Clean Streams Law and the federal Clean Water Act but also a constitutional

duty for the trustee of the Commonwealth's natural resources under Article I, Section 27 of our Constitution to protect them for current and future generations.

While space does not permit an extensive literature review, the conclusions presented from the following scientific studies provide the necessary facts to either reject the alternative compliance point or at a minimum, require further analysis of its impact to other critical uses:

Reimer (1999) found acute manganese concentrations ranged from 0.6 to 3.8 mg/L and are proposed as guidelines for exposure of <96 hours. The resulting chronic manganese concentrations ranged from 0.6 to 1.9 mg/L and are proposed as guidelines for exposure exceeding 96 hours.

Lasier, P., Winger, P. & Bogenrieder, K (2000) found in acute tests LC50s determined for H. azteca progressively increased from 3.0 to 8.6 to 13.7 mg Mn/L in soft, moderately hard, and hard waters, respectively. Acute LC50 values for C. dubia averaged 6.2, 14.5 and 15.2 mg Mn/L and chronic IC50 values averaged 3.9, 8.5 and 11.5 mg Mn/L for soft, moderately-hard and hard waters, respectively. Manganese toxicity should be considered when assessing solutions with concentrations approaching these levels.

Basic legal and policy issues

The fundamental non-constitutional legal flaw in moving the point of compliance from discharge to intake is that it would permit the unregulated discharge of manganese, a pollutant, into the waters of the Commonwealth until it reaches a public water supply intake. As a matter of law and sound public policy, the prevention, reduction, and treatment if necessary, of pollution entering these waters *is the responsibility of the polluter* not the public or other downstream users. *See, e.g., Commonwealth v. Barnes & Tucker Co.* 371 A.2d 461 (Pa. 1977). The transfer of the point of compliance acts as a sub rosa transfer of the cost and responsibility of treating mine drainage from the polluters to the public. Put another way, Act 40 directs this Board to enact a regulation which creates a public subsidy of the mining industry's treatment costs, in addition to the issues regarding aquatic and public health impacts.

Moreover, from a policy standpoint, moving the point of compliance to public water supply intakes threatens the waters of the Commonwealth and the fish and other aquatic life therein.

The Constitution

As stated in the **Introduction,** the directive in Act 40 of 2017 to the Board to adopt a regulation moving the point of compliance from the point of discharge to the point at which water is taken from a stream violates the requirement in Article III, Section 3 of the Pennsylvania Constitution that bills contain no more than one subject which shall be clearly expressed in the title. Act 40 also was enacted contrary to Article III, Section 1 of the constitution which prohibits altering or amending a bill, on its passage through either House, to change its original purpose. Moreover, Act 40 also violates Article III, Section 32 of our Constitution which prohibits the passage of any special law that *inter alia* regulates mining, i.e., Act 40 is an unconstitutional special law.

Single subject and clear expression of title

Article III, Section 3 of the Pennsylvania Constitution provides: "No bill shall be passed containing more than one subject, which shall be clearly expressed in its title, except a general appropriation bill or a bill codifying or compiling the law or a part thereof." Article III, Section 3 "sets forth two distinct types of challenges, single subject challenges and clear expression of title challenges." *Pennsylvanians Against Gambling Expansion Fund, Inc.*, 877 A.2d at 400-403; *Sears v. Corbett*, 49 A.3d at 474-75. The single subject requirement is violated where the legislation at issue does not possess a single unifying subject to which all the provisions of the act are relevant. *See, Sears v. Corbett*, 49 A.3d 463, 474-75, 478 (Pa. Cmwlth. 2012), *vacated and rev'd on other grounds sub nom*, *Sears v. Wolf*, 118 A.3d 1091 (Pa. 2015), (citing *City of Philadelphia v. Commonwealth*, 838 A.2d 566 (Pa. 2003)). The clear expression of title requirement is violated where the title of the act fails to put a reasonable person on notice as to the act's contents. *Id.*

Act 40 by its very title establishes that it comingles amendments to various environmental statutes and regulations (including the ultra-vague reference to "further providing for the Environmental Quality Board" as a stand in for the directive to amend regulations to change the point of compliance for manganese) with numerous other legislative initiatives on wholly different topics. There is no unifying theme between the environmental provisions generally (and the manganese issue specifically) and the other provisions of Act 40. Act 40 by its very title thus shows the Act does not meet the single subject requirement of Article III, Section 3. *See Pennsylvanians Against Gambling Expansion Fund, Inc.*, 877 A.2d at 400-403; *Sears v. Corbett*, 49 A.3d at 478.

Act 40's title as to the required amendment of the water quality regulations to change the point of compliance for manganese merely states "further providing for the Environmental Quality Board" and does not indicate the substantial impact of the Act on the regulation of manganese in the waters of the Commonwealth. The relevant portion of the title of Act 40, "further providing for the Environmental Quality Board," utterly fails to put a reasonable person on notice as to the indisputably significant changes to Pennsylvania's regulation of discharges of industrial waste containing manganese to the waters of the Commonwealth including the transfer of treatment costs from the mining entities that caused them to the water suppliers and hence the Commonwealth's citizens. Act 40's title thus violates the clear expression of title requirement of Article III, Section 3. *See Sears v. Corbett*, 49 A.3d at 478; *see also Provident Life & Trust Co. v. Hammond*, 79 A. 628, 630-31 (Pa. 1911). Tellingly, while the House Fiscal note obliquely references the manganese provision, the Senate Fiscal note omits any mention whatsoever.

Original purpose

Act 40 also violates the Constitution's original purpose provision. Article III, Section 1 of the Pennsylvania Constitution provides: "No law shall be passed except by bill, and no bill shall be so altered or amended, on its passage through either House, as to change its original purpose."

The original version of what became Act 40, HB 118 (PN 244), was a two page bill to amend the Health Care Facilities Act by adding an "Emergency Drug and Alcohol Detoxification Program" to provide for detoxification in licensed health care facilities and to establish detoxification facilities. By the time HB 118 finally passed both houses and was enacted as Act 40, its purpose had changed to alleged amendments to the Administrative Code of 1929, which somehow also included the directive to amend the regulation of manganese on 25 Pa. Code Chapters 93 and 96. The original health care provisions were nowhere to be found.

Here, comparing the original purpose of Act 40 to the final purpose establishes that there was an alteration or amendment that changed the original purpose. Second, the title and the contents of Act 40 as established above clearly are deceptive. *See, Christ the King Manor v. Commonwealth, Dept. of Pub. Welfare*, 911 A.2d 624 (Pa. Cmwlth. 2006), *aff'd per curiam*, 951 A.2d 255 (Pa. 2008).

The original-purpose rule requires that a bill must not be altered or amended to change its original purpose. The original purpose of HB 118 was to establish drug

and alcohol detox programs. After various amendments, the final purpose goes far beyond, and actually eliminates, the original purpose.

Special Law

Article III, Section 32 of our Constitution provides in pertinent part:

> The General Assembly shall pass no local or special law in any case which has been or can be provided for by general law and specifically the General Assembly shall not pass any local or special law:
>
> * * *
>
> 7. Regulating labor, trade, mining or manufacturing:
>
> * * *

Act 40 directs and enables the preferential treatment of the mining industry to the detriment of the Commonwealth's citizens and their environment by allowing increased pollution of the waters of the Commonwealth, abatement of which will be borne by those citizens, rather that the polluters. This result is contrary to Article III, Section 32. See, e.g., *Robinson Twp. v. Commonwealth*, 147 A.3d 536 (Pa. 2016).

We submit that where the statute underlying the directive to promulgate a regulation is constitutionally infirm, the resulting regulation should not be approved and cannot stand.

Conclusion

The Environmental Quality Board published a proposed regulation to adopt a manganese water quality toxic substances standard that is more protective of public health in the July 25 Pa Bulletin for public comment. The Concerned Groups wholeheartedly support the change from 1.0 mg/l to 0.3 mg/l. The Board should reject any change in the point of compliance as it is based on bad science, is deleterious to the health of the Commonwealth's citizens and aquatic life, places the financial burden on water suppliers and citizens rather than the polluters, and stems from a constitutionally infirm statute. Maintaining the discharge point as the point of compliance protects all water uses between the point of discharge and the point of a downstream drinking water intake. The Clean Streams Law, the Safe

Drinking Water Act, the federal Clean Water Act and Article I, Section 27 require nothing less.

References

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Department of Environmental Protection Bureau of Safe Drinking Water P.O. Box 8467, 10th Floor RCSOB Harrisburg, PA 17105-8467 Phone: 717-772-4018 Web: https://www.dep.pa.gov/Citizens/My-Water/PublicDrinkingWater/Pages/default.aspx

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