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DATE: February 23, 2022

TO: Environmental Quality Board  
P.O. Box 8477  
Harrisburg, PA 17105-2063

**Re: Proposed Rulemaking on National Pollutant Discharge Elimination System (NPDES) Schedules of Compliance**

We, Three Rivers Waterkeeper (3RWK), thank you for the opportunity to provide comments on the proposed rule, “National Pollutant Discharge Elimination System (NPDES) Schedules of Compliance” (the proposed rule) published in *Pa Bulletin Vol. 52 Issue 3*, Saturday January 15, 2022. 3RWK was founded in 2009 and aims to improve and protect the water quality of the Allegheny, Monongahela, and Ohio Rivers. These waterways are critical to the health, vitality, and economic prosperity of our region and communities. We are both a scientific and legal advocate for the community, working to ensure that our three rivers are protected and that our waters are safe to drink, fish, swim, and enjoy. We are one of the 300 organizations that make up the global Waterkeeper Alliance and work together to connect local communities to global environmental and advocacy resources. Due to this and our significant experience and

knowledge as stewards and advocates for the Three Rivers, we believe that we can provide DEP with valuable insight on the proposed rule.

Combined sewage overflow (CSO) discharges cause serious impacts to the environment and human health. They also impact Pittsburgh's tourism and economy. These impacts are likely to become more frequent with Pittsburgh's population growth and the weather effects from climate change. The proposed amendment to remove the time frame to reach compliance will set a precedent that will create an environmental practice of extending and eliminating compliance schedules and will only exasperate our environmental pollution in our waterways – perpetually kicking the preverbal can to our next generation, only to continually accumulate pollution and violating our rights to clean water as outline by the Clean Water Act. We understand DEP's concerns that the current regulation does not align with current practices as the economic struggle to meet regulations our older sewage systems is daunting. However, eliminating compliance schedules will have serious consequences to our environment and does not guarantee our right to clean water. We recognize the difficulty and cost of replacing Pittsburgh's CSO infrastructure; nevertheless, public and environmental health are at risk with continued allowable violations to the Clean Water Act.

**I. CSOs cause serious harm to our waterways, to human health and safety, and they affect our tourism industry and economy.**

CSO discharges can contain untreated domestic, commercial, and industrial wastes, as well as surface runoff – all of which can contain many different types of contaminants that are toxic to human and environmental health. Contaminants may include bacteria, pathogens,

oxygen-demanding pollutants, suspended solids, nutrients, toxics, and floatable matter.<sup>1</sup> These contaminants have a variety of adverse impacts on Pennsylvania waterbodies and public health. Specifically, CSOs pose a threat to our drinking water supplies as the rivers supply the main source of drinking water to 90% of Allegheny County residents.<sup>2</sup> Additionally, CSOs have contributed to shellfish harvesting restrictions, water use closures, and fish kills. Runoff, containing raw sewage, contaminates the water with bacteria and viruses, and increases the risk of E. Coli exposure to swimmers and boaters.<sup>3</sup> This is a particular problem in the Pittsburgh region, where at least nine billion gallons of untreated sewage and storm water discharge from the sewer system into the Allegheny, Ohio, and Monongahela rivers every year.<sup>4</sup>

CSOs place both the environment and human health at risk, and many individuals may not know that they are putting their health at risk during an overflow event. When overflows occur, the Allegheny County Sanitary Authority (ALCOSAN) issues alerts in the form of orange flags placed at designated points along the waterways, via the ALCOSAN Sewer Overflow Advisory line, the ALCOSAN website, and through an opt-in text or email service notification program.<sup>5</sup> These alerts warn individuals to limit their contact with contaminated water, and to avoid submerging their eyes, face, or any open wounds in the water. Apart from the orange flags placed along the waterways, the public only learns of the alerts if they actively seek them out.

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<sup>1</sup> See EPA, Combined Sewer Overflows: Guidance for Long-Term Control Plan (Aug. 1995).

<sup>2</sup> 3 Rivers West Weather, *About the Wet Weather Issue*, <https://www.3riverswetweather.org/about-wet-weather-issue> (last visited Feb. 14, 2022).

<sup>3</sup> Micheal Lynch, *ALCOSAN Issues Sewer Overflow Alerts* (May 8, 2015), <https://www.wesa.fm/identity-justice/2015-05-08/alcosan-issues-sewer-overflow-alerts>.

<sup>4</sup> Teake Zuidema, *Raw sewage flows into Pittsburgh's rivers. Is there an environmentally friendly fix that won't break the bank?* (Dec. 6, 2017) <https://www.publicsource.org/will-green-or-gray-infrastructure-solve-the-problem-of-raw-sewage-running-into-the-pittsburgh-regions-rivers/>.

<sup>5</sup> ALCOSAN, Sewer Overflow Advisories, <https://www.alcosan.org/our-plan/sewer-overflow-advisories> (last visited Feb. 14, 2022).

Further, these alerts only serve as a caution, they do not prohibit the public from recreational river activities. Individuals who do not understand the serious health risks, or are not adequately warned, risk illness and infection when interacting with Pennsylvania waterways during alert periods.

CSOs impact recreational activities, tourism and, thus, Pennsylvania's economy. There are eleven alerts, on average per year, which average seven days in length, however they can vary from one to forty-five days.<sup>6</sup> The river advisories are in effect for around 50%, or seventy days, of each recreational season.<sup>7</sup> Therefore, during the average recreational season, people are either discouraged from engaging in recreational river activities altogether for half the season or potentially engage in river activities that expose themselves to harmful bacteria. The three rivers and their watersheds provide valuable ecosystem services, outdoor recreational activities such as fishing and kayaking, and contribute to tourism. Pittsburgh citizens and tourists cannot take full advantage of our three rivers and their watersheds under our current CSO problem. Eliminating the five-year requirement for long term control plans (LTCP) will prolong these environmental and public health problems and dissuade the public and tourists from using our rivers.

## **II. CSO problems will only become worse with population growth and climate change impacts.**

Combined sewer systems collect rainwater, runoff, and sewage through one system and direct it to a wastewater treatment center. For example, ALCOSAN manages Allegheny County,

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<sup>6</sup> Allegheny County, Combined Sewer Overflow Advisory FAQ, <https://alleghenycounty.us/Health-Department/Programs/Waste--and-Water-Related/Water-Pollution-Control/CSO-Advisory-FAQ.aspx> (last visited Feb. 14, 2022).

<sup>7</sup> 3 Rivers Wet Weather, *supra* note 2.

covering Pittsburgh and eighty-two other municipalities.<sup>8</sup> Originally dedicated in 1959, the ALCOSAN treatment center is currently not large enough to receive all the runoff during wet weather periods because it is old infrastructure built before any environmental regulations were put in place. Additionally, it does *not* account for today's much larger population. While the current state of Pennsylvania's water quality is an urgent environmental and public health issue, in the Pittsburgh area it becomes even more so when considering population growth and the probability of increased wet weather due to climate change.

Allegheny County grew by 27,230 residents in the 2020 census. While this represents a seemingly marginal increase of only 2.2%, it is the first time the county has grown in population since 1960. This growth not only outperformed estimates by 3%, but it also represents one of the largest outperformances in the entire country. This data indicates a general population growth trend. Pittsburgh has many impermeable surfaces, clay soils, and steep topography. Pittsburgh's geography means rainwater flows quickly and accumulates in valleys.<sup>9</sup> As Pittsburgh continues to grow, the city will build more concrete surfaces and thus, fewer permeable areas such as trees and green spaces can be expected. This means the region will likely experience increased overflows in the future and increased pressure on the already stressed wastewater treatment system, creating the potential for even more overflow than the area currently experiences. This data and its effects on wastewater infrastructure should be considered when promulgating the

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<sup>8</sup> Zuidema, *supra* note 4.

<sup>9</sup> Sudeshna Gosh et al., *Metropolitan Regional Scale Smart City Approaches in a Shrinking City in the American Rust Belt – Case of Pittsburgh, Pennsylvania*, in SMART METROPOLITAN REGIONAL DEVELOPMENT, pg 1011 (2019) [https://www.researchgate.net/publication/325510026\\_Metropolitan\\_Regional\\_Scale\\_Smart\\_City\\_Approaches\\_in\\_a\\_Shrinking\\_City\\_in\\_the\\_American\\_Rust\\_Belt-Case\\_of\\_Pittsburgh\\_Pennsylvania](https://www.researchgate.net/publication/325510026_Metropolitan_Regional_Scale_Smart_City_Approaches_in_a_Shrinking_City_in_the_American_Rust_Belt-Case_of_Pittsburgh_Pennsylvania).

proposed rule. Additionally, this data should be considered in combination with the data on likely increased precipitation caused by climate change.

Climate change is expected to result in more frequent storm events and more frequent wet weather. This means there will be more frequent CSO discharges, larger volumes of water and more contaminants discharging into our waterways. The CSO problem currently has significant impacts on the environment, however, the combination of climate change impacts and population growth will make this problem exponentially worse. Considering these future impacts, it is not rational to amend the five-year compliance schedule for LTCP and delay fixing this problem.

**III. The five-year compliance schedule was implemented to limit future CSO impacts, and that reasoning has not changed.**

When the current rule was promulgated over a decade ago, it set a meaningful five-year term for LTCPs. Pennsylvania has one of the most serious overflow issues in the country with estimated yearly CSO and sanitary sewer overflows (SSO) exceeding nine billion gallons.<sup>10</sup> This is particularly true for Allegheny County, which has 448 outfalls with CSO/SSO potential. Additionally, DEP has classified nearly half of all Pittsburgh area waterways, more than 940 miles, as impaired. Storm water runoff is one of the most frequent contributors to stream impairments. Because the area's wastewater system capacity can be overwhelmed by rainfall volumes as low as 0.1 inches,<sup>11</sup> the issue of how long it takes permittees to mitigate CSOs is one of great urgency for environmental integrity as well as public health and safety.

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<sup>10</sup> Danielle Rhea, *What are Combined Sewer Overflows?*, <https://extension.psu.edu/what-are-combined-sewer-overflows> (last updated April 8, 2021).

<sup>11</sup> Upper Allegheny Joint Sanitary Authority, *Combined Sewer Overflow*, <https://uajsa.com/combined-sewer-overflow/> (last visited Feb. 14, 2022).

It is therefore important that the regulations concerning CSOs are more stringent in Pennsylvania and that they pressure municipalities to prioritize funding realistic CSO reduction strategies and infrastructure. A five-year implementation period for LTCPs is necessary because Pennsylvania's environment and citizens require it to protect our health and environment. The proposed rule should not replace the original regulation simply because permittees will not prioritize adhering to a deadline and DEP will not enforce adherence to that deadline. The proposed rule, allowing for individual LTCP compliance periods on a case-by-case basis, will eliminate the pressure inherent in a short, fixed period and will increase the likelihood that Pennsylvania water quality will remain among the worst in the nation.

**IV. The proposed rulemaking sets a dangerous precedent by delaying remedies for environmental problems.**

3RWK recognizes and appreciates that the goal of this proposed rulemaking is to bring permittees into compliance and mitigate Pennsylvania's dire CSO issue. However, we do not believe that this proposed rulemaking provides the best path forward for achieving this goal. Amending a regulation rather than changing agency practices sets a dangerous precedent for future environmental regulations. The proposed rule is only delaying the inevitable and causing environmental degradation during the delay. This is not a suitable solution. We have environmental laws and regulations for a reason, to improve the quality of our environment. If agencies stop embracing complicated problems and simply kick the problem down the road, our environment will never improve, and ecosystems and human health will suffer indefinitely.

**V. The proposed rule raises procedural concerns, in its IRRC Regulatory Analysis Form, and substantive concerns, in the text of the rule.**

The proposed rule raises several concerns. First, the IRRC Regulatory Analysis Form for this proposed rule does not include any data nor reference to the water quality achievable by adhering to the current five-year LTCP compliance schedule. This lack of data is concerning because the proposed rule will likely increase the volume of overflow as opposed to the current five-year LTCP. DEP should consider all available data to accurately understand the costs and benefits of this proposed rule to the environment.

Second, we are disappointed that in query (26) of the IRRC Regulatory Analysis Form, DEP did not specifically describe the “alternative regulatory provisions” that DEP and EPA explored. The IRRC Regulatory Analysis Form merely states that alternatives had been explored, but it would be beneficial for affected individuals to have a description of any alternative regulatory provisions which were considered and rejected. Additionally, it would be beneficial to have an explanation as to why the option selected is the least burdensome or most beneficial option.

Third, the proposed rule does not embrace pollution prevention that it is necessary for preserving our Nation’s waters – and protecting our drinking water source. Pollution prevention must be considered under the Clean Water Act. Specifically, the Clean Water Act puts forth a goal of restoring and preserving the chemical, physical, and biological integrity of our Nation’s



waters.<sup>12</sup> This rule runs counter to the Act's goal because the proposed rule extends the time that our waterways will be out of compliance with water quality standards.

Lastly, the proposed rule states that there will be no negative impacts to human health or the environment, however, the proposed rule does not explain how it will achieve this. As will be discussed in Section VI the proposed rule will prolong Pennsylvania's CSO issues. CSOs have many negative effects on our waterways. Thus, it is unclear how prolonging the problem will not negatively affect the environment.

**VI. There are other solutions to Pennsylvania's CSO problem beside extending the compliance schedule and we urge DEP to consider alternatives.**

3RWK recognizes that upgrading the infrastructure in the Pittsburgh region alone is expensive, and that many individual municipalities may not have the funding available or the political will to fund such upgrades. However, Pennsylvania is receiving \$240,000,000 from the federal government specifically for clean water issues. While insufficient to cover the entire cost of all permittees' LTCP implementations, some may be allocated for such use. Additionally, DEP should explore regional approaches to the overflow problem as a cost-saving mechanism and include all avenues of green infrastructure in that exploration.

ALCOSAN has developed multiple plans targeting the region's CSO problem under an EPA consent decree. The first in 2012, the "Wet Weather Plan," cost \$3.6 billion and was criticized for its lack of "green technology," nature-based solutions that aim to decrease runoff such as permeable green spaces, rain gardens, green roofs, and its heavy reliance on "grey

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<sup>12</sup> 33 U.S.C. § 1251.

technology,” such as constructing pipes, pumps, and holding facilities.<sup>13</sup> While grey technology increases capacity, green technology controls excess storm water. ALCOSAN later released its “Clean Water Plan” in 2019, which integrated green technology projects with plans to expand capacity, and with a projected cost of \$2 billion.<sup>14</sup> Under this new plan, ALCOSAN now has a deadline of 2036 to reduce sewage overflows by seven billion gallons.<sup>15</sup>

The projected cost of the Clean Water Plan was reduced by \$1.6 billion by incorporating runoff mitigation methods with plans to expand the pipes and treatment plants. Studies have shown that green space can reduce the operating and capital costs of storm water management.<sup>16</sup> Further, other cities have successfully employed creative technologies such as biodigesters to curb the costs of running treatment plants.<sup>17</sup> The biodigesters convert the fecal sludge from wastewater treatment plants into energy, which offsets the cost of running the plants.<sup>18</sup> Solutions are within reach, however they won’t be realized when we do not set compliance schedules.

## **VII. Conclusion**

CSOs have many negative impacts on our river ecosystems and on human health. The proposed rule, as it stands, will prolong these negative impacts and will worsen with population growth and climate change. We are concerned that this proposed rule sets dangerous precedent for future agency actions on environmental problems. Additionally, the proposed rule has several procedural concerns and while it states that it will not negatively impact human health and the

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<sup>13</sup> Meredith Bennett, *Combined Sewer Overflows: A Big Problem in the City of Bridges*, 4 D.U. QUARK 16, 20 (2019). <https://dsc.duq.edu/duquark/vol4/iss1/6>.

<sup>14</sup> *Id.* at 22.

<sup>15</sup> *Id.*

<sup>16</sup> Daniel Aiello et al., *Measuring the Economic Impact of Green Space in Pittsburgh*, pg. 43 (2010). <https://www.heinz.cmu.edu/ced/file/ura-final-rev-report.pdf>.

<sup>17</sup> Bennett, *supra* note 13, at 23.

<sup>18</sup> *Id.*



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environment, the rule fails to explain how it will not have negative impacts. Preserving the five-year requirement for LTCPs is beneficial and necessary to prompt adequate research and investment into the CSO problem in Pennsylvania. Further, the proposed rule promotes complacency around the issue and sends the message that CSOs are not a priority. We understand DEP's concern that its regulation does not align with its practices, but we urge DEP to consider other alternatives than extending the compliance schedule.

Sincerely,

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