		INDEDENDENT DECLIF (TODA			
Regulatory Analysis For (Completed by Promulgating Agency)	rm	INDEPENDENT REGULATORY REVIEW COMMISSION			
(All Comments submitted on this regulation will appear on IRRC's website					
(1) Agency:					
Department of Environmental Protection					
(2) Agency Number: 7					
Identification Number: 577		IRRC Number:			
(3) PA Code Cite:					
25 Pa. Code, Chapter 93					
(4) Short Title:					
Water Quality Standards – Triennial Review					
(5) Agency Contacts (List Telephone Number and Email Address):					
Primary Contact: Laura Griffin; 717.783.8727; laurgriffi@pa.gov Secondary Contact: Ezra Thrush; 717.783.8727; ezthrush@pa.gov					
(6) Type of Rulemaking (check applicable box):					
Proposed Regulation					
☐ Final Regulation ☐ Final Omitted Regulation	Final Regulation Certific				
_	Certification by the Attorney General				
(7) Briefly explain the regulation in clear and nonte	chnical langua	ge. (100 words or less)			
Section 303(c)(1) of the federal Clean Water Act (CWA) and the federal regulations at 40 CFR § 131.20 require states to periodically, but at least once every three years, review and revise as necessary their water quality standards. This requirement is commonly referred to as the state's triennial review of water quality standards. This proposed regulation – the Commonwealth's tenth triennial review of water quality standards – fulfills the Commonwealth's obligation to periodically review and revise its water quality standards and updates the water quality standards such that the surface waters of this Commonwealth are afforded the appropriate level of protection.					
(8) State the statutory authority for the regulation. Include <u>specific</u> statutory citation.					
This proposed regulation is being made under the authority of sections 5(b)(1) and 402 of The Clean Streams Law (35 P.S. §§ 691.5(b)(1) and 691.402), which authorize the Environmental Quality Board (Board) to develop and adopt rules and regulations to implement The Clean Streams Law (35 P.S. §§ 691.1—691.1001) and section 1920-A of The Administrative Code of 1929, (71 P.S. § 510-20), which grants to the Board the power and duty to formulate, adopt and promulgate rules and regulations for the proper performance of the work of the Department of Environmental Protection (Department)					

(9) Is the regulation mandated by any federal or state law or court order, or federal regulation? Are there any relevant state or federal court decisions? If yes, cite the specific law, case or regulation as well as, any deadlines for action.

Under sections 4, 5 and 402 of The Clean Streams Law (CSL), the Department has the duty to formulate regulations that prevent and eliminate water pollution. "Pollution" is defined by the CSL as "contamination of any waters of the Commonwealth such as ... to render such waters harmful, detrimental or injurious to public health..., or to domestic, municipal, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life...." (35 P.S. §§ 691.4, 691.5, and 691.402). Section 1920-A of The Administrative Code of 1929 authorizes the Board to formulate, adopt and promulgate such rules and regulations as may be determined by the Board for proper performance of the work of the Department (71 P.S. § 510-20(b)). Where a pollutant found in discharges to surface waters is toxic to human health or aquatic life, the Commonwealth's regulations require development of appropriate water quality criteria to control pollution.

In addition, it is the duty of the Department, pursuant to section 5 of the CSL, to consider water quality management, pollution control in the watershed as a whole, as well as the present and possible future uses of waters in adopting regulations.

Section 303(c) of the federal CWA and 40 CFR Part 131 require states to develop water quality standards that consist of designated uses, water quality criteria to protect those uses, and antidegradation requirements. Such standards must "protect the public health or welfare and enhance the quality of water" (33 U.S.C.A. § 1313(c)). Section 303(c)(2)(B) directs states to adopt numeric criteria for toxic pollutants if they are present in a discharge that could reasonably be expected to interfere with designated uses, and as necessary to support those uses. In addition, such standards must take into consideration water uses including public water supplies, propagation of fish and wildlife, recreational purposes, agricultural purposes, and industrial purposes. Section 101(a)(3) of the CWA declares the national policy that the discharge of toxic pollutants in toxic amounts be prohibited (33 U.S.C.A. § 1251(a)(3)).

(10) State why the regulation is needed. Explain the compelling public interest that justifies the regulation. Describe who will benefit from the regulation. Quantify the benefits as completely as possible and approximate the number of people who will benefit.

The purpose of developing water quality standards is to protect this Commonwealth's surface waters. Through the Department's administration of the Commonwealth's water quality standards program, the Commonwealth's surface waters are protected for a variety of uses including: aquatic life; drinking water supplies for humans, livestock, and wildlife; irrigation for crops, turf, and other horticultural activities; industrial water supplies; fish consumption; recreation; and special protection. All residents and visitors to this Commonwealth benefit from the protection of water quality in the Commonwealth's surface waters at levels appropriate for the protected uses of those surface waters.

Periodic updates to the Commonwealth's water quality standards are required by the CWA and ensure that the standards are based on current science, recommendations, and methodologies, which includes U.S. Environmental Protection Agency (EPA) mandates, recommendations, and guidance. The federal mandate for states to develop water quality criteria is found at section 303(c) of the CWA. This proposed regulation is necessary to improve total pollution control in this Commonwealth. Water quality standards are instream water quality goals that are implemented by imposing specific regulatory requirements on individual sources of pollution and are used to determine appropriate treatment requirements, best management practices (BMPs), and effluent limitations.

This Commonwealth's residents and visitors and its natural resources benefit from providing the appropriate level of protection to preserve the integrity of existing and designated uses of surface waters in this Commonwealth. Protecting water quality provides economic value to present and future generations in the form of a cleaner water supply for human consumption, wildlife, irrigation, and industrial use. For example, when water used for drinking water supplies is protected, the consumers benefit from lower drinking water treatment costs and reduced medical costs associated with drinking water-related illnesses. Water quality standards also ensure that clean surface water is available for irrigation of crops and livestock and for use in industrial processes. Additionally, appropriate water quality standards protect aquatic life and provide for recreational opportunities such as fishing (including fish consumption), water contact sports, and boating.

(11) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulations.

No. The proposed regulations are not more stringent than federal standards.

(12) How does this regulation compare with those of the other states? How will this affect Pennsylvania's ability to compete with other states?

Since other states are also required to maintain and periodically review and update water quality standards, based on the federal mandate at section 303(c) of the federal CWA and 40 CFR Part 131, the proposed rulemaking will not put Pennsylvania at a competitive disadvantage to other states. If other states or tribes have not yet evaluated or adopted EPA's water quality criteria recommendations under CWA § 304(a), they will be required to consider EPA's recommendations during their next triennial review of water quality standards.

(13) Will the regulation affect any other regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

No other state regulations are affected by this proposed regulation.

(14) Describe the communications with and solicitation of input from the public, any advisory council/group, small businesses and groups representing small businesses in the development and drafting of the regulation. List the specific persons and/or groups who were involved. ("Small business" is defined in Section 3 of the Regulatory Review Act, Act 76 of 2012.)

The Department presented the draft scope for this tenth triennial review of water quality standards to the Water Resources Advisory Committee (WRAC) on May 19, 2022. On November 17, 2022, the Department met with WRAC to discuss the draft proposed amendments to Chapter 93, and WRAC voted to support the Department's presentation of this proposed rulemaking to the Board. In addition, the Department provided to the Agricultural Advisory Board, on December 8, 2022, a regulatory review that included this triennial review of water quality standards.

(15) Identify the types and number of persons, businesses, small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012) and organizations which will be affected by the regulation. How are they affected?

Existing, new, or expanded activities or projects which result in discharges to waters of the Commonwealth and require a Department permit or approval are required to implement treatment or BMPs to meet the water quality standards established by this proposed regulation. Such treatment and practices may result in higher design, engineering, construction, monitoring, and treatment costs. However, it is not possible to identify the total number of persons, businesses, and organizations that will be affected by the proposed regulation for new or expanded discharge activities, or the potential costs associated with new or expanded activities. It is not possible to predict the future business decisions of existing or potentially new entities that choose to conduct associated activities that will be affected by these proposed regulations. Therefore, it is not possible or practicable to quantify the technology needs and BMP costs that may be associated with these future activities. The proposed regulations do, however, establish a clear and appropriate set of goals, objectives, and targets to which these persons, businesses, and organizations can plan and design towards.

There are approximately 10,300 facilities across the Commonwealth that hold permits issued pursuant to 25 Pa. Code Chapter 92a (relating to National Pollutant Discharge Elimination System (NPDES) permitting, monitoring and compliance). The Department identified 274 active NPDES permits with effluent limitations for one or more of the toxic substances included in this proposed rulemaking. These 274 active NPDES permits include permits for treated sewage, industrial waste, groundwater remediation, and stormwater associated with industrial activities.

A review of the federal Small Business Size Regulations under 13 CFR Part 121 provides a standard for determining what constitutes a small business. From the 274 permitted facilities identified above, the Department randomly selected and analyzed a subset of 81 permits and determined that 13 permitted entities, or approximately 16%, were likely to be classified as a small business based on available information. Using this subset analysis, the Department estimates that approximately 44 out of those 274 permitted entities are classified as small businesses.

There are also thousands of active earth disturbance activities that occur across the state and require general or individual NPDES permits for discharges of stormwater associated with construction activities issued under 25 Pa. Code Chapter 102 (relating to erosion and sediment control). Any person proposing a new earth disturbance activity requiring a permit under Chapter 102 must comply with this proposed regulation, as applicable.

(16) List the persons, groups or entities, including small businesses, that will be required to comply with the regulation. Approximate the number that will be required to comply.

All persons, groups, or entities with proposed or existing point source discharges that flow into surface waters of the Commonwealth must comply with the proposed regulation. There are approximately 274 NPDES discharge permits that currently contain effluent limitations for one or more of the 17 pollutants included in the proposed regulation. A subsampling of the 274 NPDES permits indicates that a majority of the permits are likely not associated with small businesses as defined in Section 3 of the Commonwealth's Regulatory Review Act, 71 P.S. §§ 745.1—745.14.

Also, see the response to question #15.

(17) Identify the financial, economic and social impact of the regulation on individuals, small businesses, businesses and labor communities and other public and private organizations. Evaluate the benefits expected as a result of the regulation.

Overall, the Commonwealth's residents and visitors and its natural resources benefit from providing the appropriate level of protection to preserve the integrity of existing and designated uses of surface waters in this Commonwealth. Protecting water quality provides economic value to present and future generations in the form of a clean water supply for human consumption, wildlife, irrigation, and industrial use. It also protects aquatic life and provides for recreational opportunities such as fishing (including fish consumption), water contact sports, and boating.

All of this Commonwealth's residents and visitors, both present and future, will benefit from having clean water that is protected and maintained at appropriate levels of water quality. Any reduction in the total toxic load in this Commonwealth's surface waters is likely to have a positive effect on the human health of its residents. This will translate into a yet unknown economic benefit through avoided cleanup or remediation costs that would have been incurred later in time, as well as avoided costs for the treatment and caring for persons with diseases and disabilities that can be reasonably attributed to environmental contaminants in surface waters.

Reduced toxics in Pennsylvania's waterways positively impacts the recreational fishing and tourism industries by increasing the availability and use of swimming and fishing locations throughout this Commonwealth. Additionally, cleaner rivers and fish may lead to increased birding and wildlife viewing opportunities, as the benefits of cleaner water and less contaminated fish cascade up the food chain, resulting in substantial economic benefits. Persons who recreate on this Commonwealth's surface waters and who fish, both for sport and consumption, in those waters will benefit from better water quality protection.

A reduction in toxics found in Pennsylvania's waterways may also lead to increased property values for properties located near rivers or lakes. A 1979 study by Epp and Al-Ani used real estate prices to determine value of improvements in water quality in small rivers and streams in Pennsylvania. Water quality, whether measured in pH or by the owner's perception, has a significant effect on the price of adjacent property. Epp and Al-Ani's analysis showed a positive correlation between water quality and housing values. They concluded that buyers are aware of the environmental setting of a home and that differences in the quality of nearby waters affect the price paid for a residential property.

A 2006 study from the Great Lakes region (Braden et al. 2006) estimated that property values were significantly depressed in two regions associated with toxic contaminants (polycyclic aromatic hydrocarbons, polychlorinated biphenyls and heavy metals). The study showed that a portion of the Buffalo River region (approximately 6 miles long) had depressed property values of between \$83 million and \$118 million for single-family homes, and between \$57 million and \$80 million for multi-family homes, as a result of toxic sediments. The same study estimated that a portion of the Sheboygan River (approximately 14 miles long) had depressed property values of between \$80 million and \$120 million as the result of toxics. While this study related to the economic effect of contaminated sediment in other waters in the Great Lakes region, the idea that toxic pollution depresses property values is easily transferable to Pennsylvania. A reduction in toxic pollution in Pennsylvania's surface waters has a substantial economic benefit to property values in close proximity to waterways.

Southwick Associates has prepared several reports for the Theodore Roosevelt Conservation Partnership that analyze the economic contribution of outdoor recreation in Pennsylvania. A 2018 report (Southwick

Associates 2018) found that, during 2016, there were more than 390,000 jobs supported by outdoor recreation activities in Pennsylvania, and that, for comparison, this was more than the number of jobs in Pennsylvania that supported the production of durable goods during the same year. This report also found that, in 2016, outdoor recreation had an economic contribution in Pennsylvania of almost \$17 billion in salaries and wages paid to employees and generated over \$300 million in federal, state, and local tax revenue. An updated report (Southwick Associates 2020) revealed that economic contributions from outdoor recreation increased from nearly \$17 billion in salaries and wages paid to employees in 2016 to nearly \$20 billion in 2020. The 2020 report also continued to highlight the fact that more Pennsylvania jobs are supported by outdoor recreation than by the production of durable goods. The 2020 report found that, in 2020, outdoor recreation activities supported more than 430,000 jobs and contributed more than \$32 billion to Pennsylvania's state gross domestic product and generated over \$6.5 billion in tax revenue at the federal, state, and locals levels, which is a significant increase from the 2016 tax revenue total of over \$300 million.

There are also economic benefits to be gained by having clearly defined remediation standards for surface waters. Under Pennsylvania's Land Recycling and Environmental Remediation Standards Act (35 P.S. §§ 6026.101—6026.908), liability relief is available, by operation of law, if a person demonstrates compliance with the environmental remediation standards established by the law. Surface water quality criteria are used to develop remediation standards under the law. Persons performing remediation depend upon these criteria to obtain a liability relief benefit under the law. An article in the *Duquesne Law Review* (Creenan and Lewis 1996) discusses the importance of liability limitation as "vital to the participation in the remediation process". The article recognizes that "liability protection provides the missing ingredient—financial incentive—for undertaking the cleanup of an industrial site." Industrial land redevelopers will benefit from these proposed regulations by having financial certainty when choosing a surface water cleanup standard and by being eligible for liability relief under state law.

Also, see the responses to questions #10 and #15.

(18) Explain how the benefits of the regulation outweigh any cost and adverse effects.

Section 4 of the CSL (Declaration of Policy) (35 P.S. § 691.4(1)) clearly states "clean, unpolluted streams are absolutely essential if Pennsylvania is to attract new manufacturing industries and to develop Pennsylvania's full share of the tourist industry." Section 4 also clearly indicates the benefits of and the essential nature of maintaining clean, unpolluted waters if Pennsylvania is "to have adequate out of door recreational facilities in the decades ahead" and that is the objective of the CSL to "not only prevent further pollution of the waters of the Commonwealth, but also to reclaim and restore to a clean, unpolluted condition every stream in Pennsylvania that is presently polluted." The prevention and elimination of water pollution is recognized as being directly related to the economic future of the Commonwealth.

Health and welfare benefits to all residents and visitors of this Commonwealth accrue from protecting the surface waters of this Commonwealth at the appropriate level. The benefits from substantial revenue and jobs associated with clean drinking water, recreational fisheries, and other industries that rely on clean water outweigh the cost and adverse effects associated with selective effluent treatment technology and BMPs for those who discharge pollutants to this Commonwealth's surface waters.

Protection of water quality before pollution occurs reduces the need for costly remedial measures that are often difficult to retrofit. In addition, maintenance of water quality eliminates the need for spending taxpayer dollars to meet additional regulatory obligations such as federally mandated total maximum daily loads (TMDLs). If a waterbody becomes impaired and is not meeting its protected water uses, the Commonwealth will be obligated to develop TMDLs and impose more stringent water quality standards.

By maintaining the appropriate water quality to protect the uses of Pennsylvania's surface waters, expensive remediation costs can be avoided.

(19) Provide a specific estimate of the costs and/or savings to the regulated community associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

NPDES permits and other approvals are required for discharges to surface waters of this Commonwealth. Discharge effluent limitations associated with these permits and other approvals are established to meet water quality standards, including the water quality criteria identified in this proposed regulation. Specific estimates of costs and savings cannot be determined because each discharge activity must be reviewed based on site-specific considerations. These site-specific considerations include, but are not limited to the size, flow, and the chemical, biological, and physical properties of both the receiving water and the discharge effluent. These site-specific considerations result in site-specific effluent limitations and treatment requirements. Generally speaking, anticipated economic impacts would primarily involve the potential for increased monitoring and sampling costs and higher treatment costs for existing, new, or expanded discharges to streams to meet any new or updated water quality standards.

The Department reviewed sampling cost information for each toxic substance in this proposed regulation that was available in the National Environmental Monitoring Index (NEMI). NEMI is a freely available compendium of information on a variety of environmental analytical test methods that was developed by the National Water Quality Monitoring Council in collaboration with partners in the federal, state, and private sectors. A review of the EPA-approved analytical test methods for each toxic substance revealed that the average cost per sample for many of these substances ranges between \$201 and \$400. A few of the analytical test methods, such as Method 4500-B B for boron, have an estimated cost per sample of less than \$50 while other analytical methods, such as Method 1624 for methyl ethyl ketone, have an estimated cost per sample of over \$400. Costs estimates were available in NEMI for each of the toxic substances in this proposed regulation with the exception of tributyltin. Note that no additional costs should be incurred by the 274 NPDES permit holders that currently have effluent limitations for one or more of these substances as a result of this proposed regulation since these entities are already required to monitor for these substances. Additional costs may be incurred for new or renewed permits if new water-quality-based effluent limitations are required to achieve any new or updated water quality criteria for the toxic substances in this proposed regulation.

(20) Provide a specific estimate of the costs and/or savings to the local governments associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

No costs will be imposed immediately upon local governments by this proposed regulation. This regulation is based on, and will be implemented through, existing Department programs, procedures, and policies. Certain municipalities or municipally-owned entities that discharge pollutants to surface waters may be affected by this proposed regulation for any existing or new discharge activity as described in the response to question #15, including publicly owned treatment works with an NPDES permit to discharge treated sewage. The costs associated with permits and performance or design requirements will be site-specific and will be based on effluent limitations or BMPs and the appropriate protections for a particular waterbody.

Local governments may gain or increase income from this proposed regulation due to potential increases in tourism and recreational revenue. For those local governments that receive income from the tourism industry, the proposed updates to water quality standards may help maintain local revenue and employment.

In addition, local land values may increase in the future as homes that are near areas of clean water and protected resources become more desirable places to live. Local governments that use surface waters as a public water supply may also gain an economic benefit by reduced source water treatment requirements. See the response to question #17 for additional details.

(21) Provide a specific estimate of the costs and/or savings to the <u>state government</u> associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required. Explain how the dollar estimates were derived.

No costs will be imposed immediately upon state government entities by this proposed regulation. This regulation is based on and will be implemented through existing Department programs, procedures and policies. Certain state agencies or state-owned entities that discharge pollutants to surface waters may be affected by this proposed regulation for any existing or new discharge activity as described in the response to question #15, including facilities with an NPDES permit to discharge treated sewage. The costs associated with permits and performance or design requirements will be site-specific and will be based on effluent limitations or best management practices and the appropriate protections for a particular waterbody.

State government entities may gain or increase income from this proposed rulemaking due to potential increases in tourism and recreational revenue. For those state government entities that receive income from the tourism industry, the proposed updates to water quality standards may help maintain state revenue and employment. In addition, land values within the Commonwealth may increase in the future as homes that are near areas of clean water and protected resources become more desirable places to live. State government entities that use surface waters as a public water supply may also gain an economic benefit by reduced source water treatment requirements. See the response to question #17 for additional details.

(22) For each of the groups and entities identified in items (19)-(21) above, submit a statement of legal, accounting or consulting procedures and additional reporting, recordkeeping or other paperwork, including copies of forms or reports, which will be required for implementation of the regulation and an explanation of measures which have been taken to minimize these requirements.

Each activity that will result in a discharge of pollutants to waters of this Commonwealth requires a review that is based on site-specific considerations, including the specific levels of pollutants expected or known to be in the discharge to waters of this Commonwealth, as well as the physical and chemical properties of the receiving water. Existing Department procedures will be used to implement this regulation.

Persons with existing or proposing new or expanded activities or projects which result in discharges to surface waters of the Commonwealth will be required to provide treatment and implement other appropriate protections to meet the water quality standards established by this proposed regulation. These requirements are generally implemented upon the issuance of new NPDES permits or the renewal or amendment of existing NPDES permits.

(22a) Are forms required for implementation of the regulation?

No additional forms are required as a result of this proposed regulation.

(22b) If forms are required for implementation of the regulation, <u>attach copies of the forms here</u>. If your agency uses electronic forms, provide links to each form or a detailed description of the information required to be reported. <u>Failure to attach forms</u>, <u>provide links</u>, <u>or provide a detailed description of the information to be reported will constitute a faulty delivery of the regulation</u>.

No additional forms are required as a result of this proposed regulation.

(23) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

	Current FY 2022-23	FY +1 2023-24	FY + 2 2024-25	FY +3 2025-26	FY + 4 2026-27	FY + 5 2027-28
SAVINGS:	\$	\$	\$	\$	\$	\$
Regulated Community	Not Measurable	Not Measurable	Not Measurable	Not Measurable	Not Measurable	Not Measurable
Local Government	"	"	"	"	"	"
State Government	۲۲	66	66	66	۲,	66
Total Savings	"	۲۲	۲۲	۲۲	"	66
COSTS:						
Regulated Community	Not Measurable	Not Measurable	Not Measurable	Not Measurable	Not Measurable	Not Measurable
Local Government	"	۲۲	۲۲	۲۲	"	"
State Government	۲,	"	"	"	۲۲	"
Total Costs	"	"	"	"	"	"
REVENUE LOSSES:						
Regulated Community	Not Measurable	Not Measurable	Not Measurable	Not Measurable	Not Measurable	Not Measurable
Local Government	"	"	"	"	"	44
State Government	۲۲	۲,	۲,	۲,	۲۲	"
Total Revenue Losses	"	"	"	"	"	"

(23a) Provide the past three-year expenditure history for programs affected by the regulation.

Program	FY -3	FY -2	FY -1	Current FY
	(2019-20)	(2020-21)	(2021-22)	(2022-23)
160-10381 Enviro Protection	\$84,023,000	\$94,202,000	\$98,036,000	\$102,719,000
Operations	1 - 4 4	, , , , , , , ,	1,	1 - 4 4
161-10382				
Enviro Program	\$27,920,000	\$32,041,000	\$34,160,000	\$35,739,000
Management				

(24) For any regulation that may have an adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), provide an economic impact statement that includes the following:

(a) An identification and estimate of the number of small businesses subject to the regulation.

Persons with proposed or existing discharges into surface waters of the Commonwealth must comply with the proposed regulation. The Department analyzed a subset of permits and estimated that approximately 44 permitted facilities out of the 274 permitted facilities potentially affected by this proposed regulation are classified as small businesses. Also, see the response to question #15.

(b) The projected reporting, recordkeeping, and other administrative costs required for compliance with the proposed regulation, including the type of professional skills necessary for preparation of the report or record.

Each activity that will result in a discharge of pollutants to waters of this Commonwealth requires a review that is based on site-specific considerations. NPDES permits and other approvals will be required for discharges to surface waters, using the water quality criteria and standards identified in the regulations. Existing Department procedures will be used to implement this proposed regulation.

(c) A statement of probable effect on impacted small businesses.

Each activity that will result in a discharge of pollutants to waters of this Commonwealth requires a review that is based on site-specific considerations. NPDES permits and other approvals will be required for discharges to surface waters, using the water quality criteria and standards identified in the regulations. Existing Department procedures will be used to implement this proposed regulation.

(d) A description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation.

There were no non-regulatory alternatives or less intrusive methods available to consider in order to achieve the purpose of this proposed regulation.

In addition to the flexibility afforded by the regulatory mechanisms in the NPDES permitting program, the water quality standards regulations include a provision that allows for the development of site-specific water quality criteria, in lieu of the statewide criteria, under certain circumstances. A discharger has the opportunity to weigh the costs of developing a site-specific standard against the usage of an existing statewide standard.

(25) List any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, the elderly, small businesses, and farmers.

While no special provisions are included in this proposed regulation, it is important to note that this regulation will afford the water quality protection necessary to ensure clean water for residents of and visitors to this Commonwealth.

(26) Include a description of any alternative regulatory provisions which have been considered and rejected and a statement that the least burdensome acceptable alternative has been selected.

No alternative regulatory schemes are available to achieve the correct level of protection for the surface waters of this Commonwealth.

(27) In conducting a regulatory flexibility analysis, explain whether regulatory methods were considered that will minimize any adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), including:

(a) The establishment of less stringent compliance or reporting requirements for small businesses.

This proposed regulation does not establish or revise compliance or reporting requirements for small businesses. There were no less stringent compliance or reporting requirements to consider in this case. Any water quality criteria that are less stringent than those recommended by the Department, and accepted by the Board in the proposed rulemaking, would not be protective enough for the waters of the Commonwealth and would negate the benefits listed in the response to question #17. The proposed regulation reflects the results of a rigorous scientific evaluation of regulatory criteria.

(b) The establishment of less stringent schedules or deadlines for compliance or reporting requirements for small businesses.

This proposed regulation does not establish or revise schedules or deadlines for compliance or reporting requirements for small businesses Schedules of compliance and reporting requirements to meet the standards of this proposed regulation may be considered when permit or approval actions are taken, in accordance with 25 Pa. Code Chapter 92a. They are not considered as part of this scientific evaluation of the correct water quality criteria needed to protect surface waters.

(c) The consolidation or simplification of compliance or reporting requirements for small businesses.

Schedules of compliance and reporting requirements to meet the standards of this proposed regulation may be considered when permit or approval actions are taken. They are not part of this scientific evaluation and establishment of the correct water quality criteria needed to protect surface waters.

(d) The establishment of performing standards for small businesses to replace design or operational standards required in the regulation.

The proposed regulations represent performance standards. They identify the instream goals for water quality protection and do not identify the design or operational standards that must be used to meet the goals.

(e) The exemption of small businesses from all or any part of the requirements contained in the regulation.

There were no such exemptions of small businesses to consider in this case.

(28) If data is the basis for this regulation, please provide a description of the data, explain in detail how the data was obtained, and how it meets the acceptability standard for empirical, replicable and testable data that is supported by documentation, statistics, reports, studies or research. Please submit data or supporting materials with the regulatory package. If the material exceeds 50 pages, please provide it in a searchable electronic format or provide a list of citations and internet links that, where possible, can be accessed in a searchable format in lieu of the actual material. If other data was considered but not used, please explain why that data was determined not to be acceptable.

References cited in this Regulatory Analysis Form:

- Braden, J. B, L. O. Taylor, D. Won, N. Mays, A. Cangelosi, and A. A. Patunru. 2006. Economic benefits of sediment remediation. Project GL-96553601. Great Lakes National Program Office, U.S. Environmental Protection Agency, Chicago, Illinois. (www.nemw.org/Econ)
- Creenan, James W. and John Q. Lewis. 1996. Pennsylvania's Land Recycling Program: Solving the Brownfields Problem with Remediation Standards and Limited Liability. *Duquesne Law Review* 34(3): 661-701. (https://dsc.duq.edu/dlr/vol34/iss3/8/)
- Epp, D. J. and K. S. Al-Ani. 1979. The effect of water quality on rural nonfarm residential property values. *American Journal of Agricultural Economics* 61(3): 529-534. (www.jstor.org/stable/1239441)
- Southwick Associates. 2018. "The Power of outdoor recreation spending in Pennsylvania: How hunting, fishing, and outdoor activities help support a healthy state economy". Theodore Roosevelt Conservation Partnership, Washington D.C. (www.trcp.org/wp-content/uploads/2018/12/TRCP-and-Southwick-PA-Economic-Analysis-12-6-18.pdf)
- Southwick Associates. 2020. "Estimating the economic contributions of outdoor recreation in Pennsylvania: An analysis of 2020 state-level economic contributions made by hunting, fishing, and other outdoor recreation activities". Theodore Roosevelt Conservation Partnership, Washington D.C. (www.trcp.org/wp-content/uploads/2022/04/TRCP-PA-Economic-Report-2020-FINAL.pdf)

Please see the attached rationale documents for additional literature, references and citations used to inform the criteria recommendations contained in this proposed rulemaking.

The Department assessed EPA's criteria recommendations under CWA § 304(a), the risk assessment information available in EPA's Integrated Risk Information System (IRIS) database, other peer-reviewed technical documentation and scientific literature and found it was scientifically sound.

(29) Include a schedule for review of the regulation including:

A. The length of the public comment period: 45 days

B. The date or dates on which any public meetings or hearings will be held:

C. The expected date of delivery of the final-form regulation:

Quarter 4, 2024

TBD

D. The expected effective date of the final-form regulation:

Upon publication in the *Pennsylvania Bulletin* as final-form rulemaking for CSL permit and approval actions, or as approved by EPA for purposes of CWA permits.

E. The expected date by which compliance with the final-form regulation will be required: Upon issuance or renewal of NPDES permits or other approvals of the Department subsequent to publication of the final-form rulemaking in the *Pennsylvania Bulletin*.

Compliance dates will be determined on a caseby-case basis in accordance with 25 Pa. Code Chapter 92a.

F. The expected date by which required permits, licenses or other approvals must be obtained:

When permits or approvals are issued or renewed subsequent to publication of the final-form rulemaking in the *Pennsylvania Bulletin*.

(30) Describe the plan developed for evaluating the continuing effectiveness of the regulations after its implementation.

The Board is not proposing to establish a sunset date for this proposed regulation because it is needed for the Department to meet its statutory obligations. The Department will continue to closely monitor this proposed regulation for its effectiveness and recommend updates to the Board as necessary.

Also, since the CWA requires review and revision of water quality standards as necessary, but at least once every three years, a schedule for review is inherently established.