



Policy Number: Policy No. 202x-xx

Title: Incentivizing the Use of Impaired Waters Policy

Effective Date: xx

Authority: SRB Compact, § 3.5, Public Law 91-575, 84 Stat. 1509 *et seq.*

Policy: The Susquehanna River Basin Commission (Commission or SRBC) encourages the use and reuse of impaired water, specifically waters impaired by abandoned mine drainage and treated wastewater, through the use of fee and timing of review incentives. It shall be the policy of the Commission to offer incentives to projects using these impaired waters, to the extent such projects conform with any and all criteria established by the Commission as part of this policy and that the use of these waters avoids adverse impacts to waters of the basin. The withdrawal and consumptive use of these waters is subject to the full regulatory review process under 18 CFR Part 806. The use of impaired waters must be beneficial and not adverse to the water resources of the Basin.

Purpose: This policy outlines the Commission's fundamental objective for the use of a subset of impaired waters, those that are 1) impaired by abandoned mine drainage or 2) treated wastewater for recycling or reuse. This policy offers incentives for the use of these waters with respect to the management and protection of the water resources of the basin. The water that is incentivized for use under this policy is a liability, and, generally, will do more harm than good if released into the environment, thereby offsetting flow regime and/or hydrologic cycle concerns potentially associated with its removal from local hydrology. This policy will incentivize withdrawals of impaired waters, leaving more pristine waterways and aquifers untouched. Additionally, this policy will incentivize the growing number of projects looking to recycle and reuse wastewater for beneficial purposes. More effective recycling and reuse of wastewater could provide important new water supplies for a variety of uses, particularly in areas where climate change may affect local drought resiliency. Finally, promoting and prioritizing the use of impaired waters offers the potential to address legacy impairment issues that have plagued some communities for decades.

Applicability: This policy applies to the review of any consumptive use or water withdrawal application, aquifer test plan/alternative hydrogeologic evaluation, including applications for new projects, project modifications, project renewals, and notices of intent. The document has been developed to provide guidance to the regulated community and Commission staff regarding the use of these impaired waters. It may also be used by the public to gain information and insight on the Commission's approach to incentivizing the use of impaired waters.

Disclaimer: The policy outlined in this document is intended to supplement existing requirements. Nothing in this policy shall affect regulatory requirements. The policies and procedures herein are not an adjudication or a regulation. This document establishes the framework within which the Commission will exercise its administrative discretion in the future and provides guidance for how the Commission will fulfill its regulatory review requirements. The Commission reserves the discretion to deviate from this policy statement if circumstances warrant.

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I. Introduction

The largest category of impaired waters in the Susquehanna River Basin (Basin) results from abandoned mine drainage (AMD). Pennsylvania is home to a massive bituminous coal region in the western part of the basin and hosts the largest anthracite coal region in the United States, located in the northeastern part of the basin. AMD is the result of historic mining and occurs when the mineral pyrite (FeS_2), contained in many formations throughout the coal regions of the basin, is exposed to air and water. This combination of pyrite, water, and air results in the formation of sulfuric acid and iron hydroxide, which can dissolve other harmful metals from surrounding rock formations. AMD that enters surface waters, either through drainage or as baseflow from AMD-impaired groundwater, has extreme and significant impacts to water quality and aquatic ecosystem health, which can result in “dead streams.” Both of the coal regions in the basin bear the legacy of past unregulated mining, with close to 2,000 of the basin’s 49,000 miles of streams, and billions of gallons of groundwater, impaired by AMD.

The other source of water subject to this policy is wastewater from a variety of sources that is designed to be recycled or reused. A project that can use treated wastewater for facility operations reduces or eliminates a withdrawal from a higher quality water in the basin, thus reserving such waterways or aquifers, in part, for natural ecosystem functions and recreational uses.

The Susquehanna River Basin Commission has broad authority for water resources management under Articles 3, 4, 7, 14 and 15 of the Susquehanna River Basin Compact (SRBC, 1971). This includes a duty to adopt and promote uniform and coordinated policies for water resources conservation and management in the basin. The Compact provides clear directives for the Commission pertaining to water quality, including impaired waters.

Commission Policy No. 2012-01 *Low Flow Protection Policy Related To Withdrawal Approvals* provides contemporary, science-based standards for withdrawals issued by the Commission to ensure that any flow alteration related to such withdrawals does not cause significant adverse impacts to the water resources of the basin and includes provisions for the use of impaired waters. The Policy’s implementing Technical Guidance - *Technical Guidance For Low Flow Protection Related To Withdrawal Approvals Under Policy No. 2012-01* - states the following:

*The [aquatic resource class] ARCs and other factors previously described generally provide for environmental flow-based standards for regional low flow protection. Additional considerations may be necessary to determine low flow protection requirements in certain unique settings, including both exceptional quality and **impaired waters**. For impaired waters, these considerations should further recognize the overall water resource management benefits of **incentivizing the use of lesser quality sources**. Lesser quality waters, such as streams impaired by mine drainage, wastewater or industrial discharges, or other pollutants may be of suitable quality to satisfy a variety of water uses **while allowing for lower levels of low flow protection** in drainage areas of all sizes. **Where withdrawals from impaired waters are determined to have overall water resource management benefits, lower monthly percent exceedance flow values***

may be recommended. The standard passby flow or conservation release threshold for mine drainage impaired stream withdrawals may not be less than the monthly P95 flow.

This Policy fulfills a part of the Commission's mission concerning the conservation, utilization, allocation, development, and management of water resources within the Basin, through promotion of the use of impaired waters. The use of these waters that can satisfy a proposed project offers opportunities to mitigate the impacts of legacy pollution and potentially reduce a project's reliance on higher quality water, as well as encourage the use of alternative supplies to increase resiliency in the face of changing climate conditions and improve conditions for disadvantaged communities burdened by legacy industrial and mining impacts. This policy offers incentives for the use of impaired waters with respect to the management and protection of the water resources of the basin.

A. Policy History

Previously, the Commission adopted a policy and resolution that encouraged the use of lesser quality waters. Over time, the Commission found that the policy was cumbersome in certain areas, rather than incentivizing, and that the resolution, while appropriate, could have included additional opportunities for the use of these waters.

In 2009 the Commission adopted Policy No. 2009-01 *Application Fee Policy for Mine Drainage Withdrawals*, which supported application fee waivers or fee reductions for projects that utilized water degraded primarily by coal mining activities. The policy prescribed a set of requirements and water quality criteria that, if met, would result in a full or partial waiver of application fees. However in almost all cases, the requirements and criteria to be met were infeasible for project sponsors and the waiver of application fees was not formulaic or predictable. As such, the policy largely went unused by the regulated community and the Commission's goal to incentivize the use of AMD impaired waters was not being met.

In 2012, the Commission passed Resolution No. 2012-01 establishing a policy to encourage and require the use and reuse of lesser quality water. The resolution prioritized review of applications for projects proposing to use mine-degraded and other lesser-quality water. It required that a project sponsor within mine drainage impaired watersheds first consider use and reuse of lesser quality water when applying for a water withdrawal or consumptive use approval. Lastly, the resolution mandated that the Commission identify and make available sources of mine drainage, including streams whose quality has been impaired by mine drainage. In response to this third item, the Commission's website hosts the Mine Drainage Portal, which provides public access to data compiled as part of the Commission's efforts to assess and track impacts to water quality from mine drainage in the basin. The 2012 resolution provided one incentive to project sponsors that rarely was requested, as priority application review proved not to be enough of an incentive to encourage the use of these waters.

This Impaired Waters Policy replaces Policy No. 2009-01 and Resolution No. 2012-01 to increase and enhance the incentives for use of these waters in the basin.

B. Definition of Impaired Waters

For the purposes of this policy, AMD impaired waters are waters impaired by abandoned mine drainage (AMD) including all discharges of waters, including streams and mine pools, impacted by mines or mined materials, whether by gravity flow or by active pumping. Waters generally must be identified as such on a state or federal list of impaired waters, including waters impaired from surface mining and subsurface mining, as well as impairment for pH and metals associated with mining activities. The Commission may also reference more current data, if they exist, for other waters not included on impaired waters lists or other supplemental data or information, including the Commission's Mine Drainage Portal. AMD can be acidic or alkaline, and emanate from abandoned or orphaned mines. In addition, AMD can be in the form of surface seepage associated with certain stockpiled (mined) materials or stockpiled mine waste products.

Treated wastewater for recycling or reuse provided that the wastewater is treated in compliance with all other federal, state and local permits and its proposed use is beneficial and appropriate.

C. Objective of the Use of Impaired Waters

The fundamental objective of this policy is to incentivize the use of impaired waters that will satisfy a proposed project use, in order to mitigate the impacts of pollution and reduce reliance on higher quality waters in the basin. The water that is incentivized for use under this policy, generally, will do more harm than good if released into the environment, thereby offsetting flow regime and/or hydrologic cycle concerns. This policy also incentivizes withdrawals of impaired waters, leaving more pristine waterways and aquifers untouched. Additionally, this policy will incentivize the growing number of projects looking to recycle and reuse wastewater for beneficial purposes. More effective recycling and reuse of wastewater could provide important new water supplies for a variety of uses, particularly in areas where climate change may affect local drought resiliency. Promotion of the use of impaired waters also offers the potential to address financial and ecological disadvantages incurred by communities impacted by long-standing impairments.

The incentives in this policy are limited to fees and review timing incentives. The withdrawal and consumptive use of these waters is subject to the full regulatory review process under 18 CFR Part 806. The use of impaired waters must be beneficial and not adverse to the water resources of the Basin.

D. Incentives

1. Incentive One – Untreated AMD:

A project applying for a direct withdrawal and/or consumptive use of water from an untreated AMD impaired source, including mine pools, generally will receive a partial application fee waiver and a full consumptive use mitigation fee waiver for the term of the docket.

Volume (gallons per day)	Application Fee Waiver	Consumptive Use Mitigation Fee Waiver
Any volume	50%	100%

The water must not be returned to surface waters without regulated treatment and compliance with federal, state, and or local permits. The project shall collect an annual water quality sample from the untreated AMD impaired source, have it analyzed at a lab for the mine drainage suite of parameters and annually report the results to the Commission.

Under the Commission’s existing Low Flow Protection Policy, passby flows and conservation releases may be relaxed if a withdrawal from impaired waters is determined by the Commission, after a review of all impacts under 18 CFR § 806.23, to have overall water resource management benefits. Policy 2012-01 states that *the standard passby flow or conservation release threshold for mine drainage impaired stream withdrawals may not be less than the monthly P95 flow*. However, where a project sponsor requests a withdrawal from an untreated AMD impaired source under this incentive, the Commission would consider that a pertinent factor in a case-by-case determination of whether the low flow protection requirements would strictly apply to the withdrawal.

2. Incentive Two - Construct AMD Treatment:

A project that builds an AMD treatment or mitigation system and applies for a withdrawal or consumptive use of the treated discharge, in part or in whole, shall receive a partial application fee waiver and full consumptive use mitigation fee waiver for the term of the approval as long as operation and maintenance of the treatment or mitigation system is maintained. The project shall collect an annual water quality sample from the treated discharge, have it analyzed at a lab for the mine drainage suite of parameters and annually report the results to the Commission.

Volume (gallons per day)	Application Fee Waiver	Consumptive Use Mitigation Fee Waiver
Any volume	80%	100%

This incentive does not apply to a project that was solely designed and functioning to improve stream quality, or enhance assimilation capacity, or provide mitigation for consumptive use of other waters of the basin, recognizing that the diversion of such waters would detract from the benefit of the original improvement project. However, the Commission remains encouraging of projects that are designed to use or improve impaired waters, in which the Consumptive Use Mitigation Policy (Policy No. 2020-02) identifies alternative methods of consumptive use mitigation, including those that utilize impaired waters for a project’s consumptive use. Such projects could see a reduction or elimination of their consumptive use mitigation fee obligations.

Under the Commission’s existing Low Flow Protection Policy, passby flows and conservation releases may be relaxed if a withdrawal from impaired waters is determined by the Commission, after a review of all impacts under 18 CFR § 806.23, to have overall water resource management benefits. Policy 2012-01 states that *the standard passby flow or conservation release threshold for mine drainage impaired stream withdrawals may not be less than the monthly P95 flow*. However, where a project sponsor constructs an AMD treatment or mitigation system and proposes to withdrawal or consumptively use that treated discharge under this incentive, the Commission would consider that a pertinent factor in a case-by-case determination of whether low flow protection requirements would strictly apply to the withdrawal.

3. Incentive Three – Treated Wastewater for Recycling and Reuse:

A project that submits application for consumptive use of treated wastewater after a review of all impacts under 18 CFR § 806.22, for recycling or reuse will generally receive a partial application fee waiver and full consumptive use mitigation fee waiver for the term of the approval.

Volume (gallons per day)	Application Fee Waiver	Consumptive Use Mitigation Fee Waiver
Any volume	50%	100 %

4. Incentive Four – Prioritized Application Review:

Review of projects by the Commission is generally reviewed by submission date. As an incentive for using impaired waters, any project identified in Incentives One through Three in this policy will be prioritized for regulatory review by Commission staff.