



Policy Number: Policy No. 2021-04

Title: Fee Incentives for the Withdrawal and Consumptive Use of AMD Impacted Waters & Treated Wastewater

Effective Date: December 17, 2021

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 impacted water, specifically waters impacted by abandoned mine drainage and treated wastewater, through the use of fee and timing review incentives. It shall be the policy of the Commission to offer incentives to projects using these impacted 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 impacted waters must not be adverse to the water resources of the Basin.

Purpose: This policy supports the Commission’s fundamental philosophy regarding the use of a subset of impacted waters, those that are 1) impacted by abandoned mine drainage, or 2) treated wastewater for recycling or reuse. These waters generally are a detriment when released to the environment, so diminishing their introduction to local hydrology offsets concerns for alteration of flow regime and/or hydrologic cycle, while at the same time leaving more pristine waterways and aquifers undiminished in quantity.

This policy will offer fee and timing review incentives for applications associated with the withdrawal or consumptive use of impacted waters. Additionally, this policy will offer incentives to 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 impacted waters offers the potential to address legacy pollution 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 application of fee and timing of review incentives for the use of these impacted waters. It may also be used by the public to gain information and insight on the Commission's approach to incentivizing the use of impacted waters in place of more pristine/clean water sources.

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 the public, project sponsors and Commission staff. The Commission reserves the discretion to deviate from this policy statement if circumstances warrant.

Page Length: 7 pages

I. Introduction

The largest category of impacted 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 base flow from AMD-impacted groundwater, in most cases has extreme and significant impacts to water quality and aquatic ecosystem health, which has the potential to result in “dead streams” if the AMD is concentrated and not diluted by higher streamflow volumes. Both of the coal regions in the Basin bear the legacy of past mining, with close to 2,000 of the Basin’s 49,000 miles of streams, and billions of gallons of groundwater, impacted by AMD.

The other source of water subject to this policy is treated wastewater from a variety of sources for recycling or reuse. 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 SRBC has broad authority for water resources management under Articles 3, 4, 7, 14, and 15 of the Susquehanna River Basin Compact (SRBC, 1972¹). 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 impacted waters.

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 withdrawal and use of impacted waters. The withdrawal and consumptive use of these waters that can satisfy a proposed project offers opportunities to 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 impacted waters with respect to the management and protection of the water resources of the Basin.

A. Applicability

This policy is intended to offer fee and timing review incentives to a project that proposes to withdraw and/or consumptively use AMD-impacted water or treated wastewater for project purposes. This includes:

¹ SRBC, 1972. Susquehanna River Basin Compact. <https://www.srbc.net/about/about-us/docs/srbc-compact.pdf>.

1. Surface water and groundwater withdrawals of 100,000 gallons per day (gpd) or more over a 30-day average from any source or combination of sources within the Basin. These include:
 - a. AMD-impacted surface waterbodies listed on member jurisdiction impaired waters lists or a waterbody with data that demonstrably support impacts from AMD;
 - b. AMD-impacted mine pools or mine workings;
 - c. AMD-impacted groundwater; and
 - d. AMD-impacted surface seeps/discharges connected to (b) or (c) above.
2. Any consumptive water use of 20,000 gpd or more over a 30-day average from any AMD-impacted water source or treated wastewater from a pipe or storage;
3. Any AMD-impacted or treated wastewater from a pipe or storage water withdrawn for natural gas activities, regardless of volume.

Any project that utilizes the incentives in this policy remains entirely subject to Commission regulations and project review standards, as well as those of all member jurisdictions.

This policy does not apply to any project beyond the scope of Commission regulations nor does it allow for the treatment of AMD or wastewater in any manner different than that regulated by existing federal/state/local laws. This policy does not apply to the withdrawal or use of treated wastewater discharge within a stream channel. This policy generally will not apply to the use of AMD-impacted water or treated wastewater as sources for potable water supply, and will require a pre-application meeting prior to any application to use these sources as a public water supply.

B. 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-impacted 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 AMD-impacted 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 impacted 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 Impacted 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.

C. Two Categories of Impacted Waters in this Policy

To qualify for the fee and timing incentives in this policy, the regulated withdrawal or consumptive use of an impacted water must be from one of the two categories listed below:

1. **Waters impacted by abandoned mine drainage (AMD)** including streams, groundwater, and mine pools impacted by mines or mined materials, whether by gravity flow or by active pumping, and impaired for pH and metals associated with mining activities. Surface waterbodies must be listed on member jurisdiction impaired waters lists. Mine pools or groundwater must be confirmed as AMD-impacted through water quality sample data that exhibit one or more elevated metals common to AMD (iron, aluminum, manganese) or pH effects with any associated acidity/alkalinity imbalances. In limited circumstances, 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.
2. **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 appropriate. Treated wastewater must be contained in a pipe or in storage prior to consumptive use in order to qualify for this policy. Treated wastewater that has been discharged to a stream channel does not qualify for incentives provided in this policy.

D. Objective of Incentivizing the Withdrawal and Use of Impacted Waters

The fundamental objective of this policy is to recognize, through fee incentives and review timing, the benefits to the Basin of a project that proposes to utilize impacted waters to satisfy a project use rather than rely 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. 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 water availability. Promotion of the use of impacted 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 withdrawal and consumptive use of impacted waters must not be adverse to the water resources of the Basin.

E. Incentives

1. General Incentive – Prioritized Application Review:

Order of review of projects by the Commission is generally sequentially by submission date. As an incentive for using impacted waters, any project qualifying under this policy identified in Fee Incentives One through Three below will be prioritized for regulatory review by Commission staff.

2. Fee Incentive One – Withdrawal or Consumptive Use of Untreated AMD:

A project applying for a direct withdrawal and/or consumptive use of water from an untreated AMD-impacted source generally will receive a partial application fee waiver and a either a full or partial consumptive use mitigation fee waiver depending on the source for the term of the docket (Table 1). The AMD-impacted 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-impacted source, have it analyzed at a lab for the mine drainage suite of parameters, and annually report the results to the Commission.

Table 1. Fee Incentive Waivers for Withdrawal or Consumptive Use of Untreated AMD

Source	Volume (gallons per day)	Application Fee Waiver	Consumptive Use Mitigation Fee Waiver
Direct discharge, mine pools and other non-stream/river sources	Any volume	50%	100%
Streams and Rivers	Any volume	50%	50%

3. Fee Incentive Two – Construct AMD Treatment for Withdrawal or Consumptive Use of Discharge:

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 (Table 2). The project shall submit a copy of its NPDES/SPDES permit water quality data for the mine drainage suite of parameters and annually report the results to the Commission.

Table 2. Fee Incentive Waivers for Constructing AMD Treatment for Withdrawal or Consumptive Use of Discharge

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 impacted waters, in which the Consumptive Use Mitigation Policy (Policy No. 2020-02) identifies alternative methods of consumptive use mitigation, including those that utilize impacted waters for a project’s consumptive use. Such projects could see a reduction or elimination of their consumptive use mitigation fee obligations.

4. Fee Incentive Three – Consumptive Use of 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 (Table 3).

Table 3. Fee Incentive Waivers for Consumptive Use of Treated Wastewater for Recycling and Reuse

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