



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

June 17, 2021

MEMORANDUM

SUBJECT: Response to the Office of Inspector General (OIG) Report *Improved Review Processes Could Advance EPA Regions 3 and 5 Oversight of State-Issued National Pollutant Discharge Elimination System Permits* dated April 21, 2021 (Report No. 21-P-0122)

FROM: Diana Esher
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Diana Esher

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TO: Kathlene Butler
Director, Water Directorate
Office of Evaluation
Office of Audit and Evaluation
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Thank you for your recommendations for improvements to our review processes for oversight of state-issued NPDES permits in West Virginia. The following is a narrative summary of the proposed corrective actions for each of the three recommendations for Region 3, followed by a summary in table format. The table includes a proposed schedule for completion of various responsive tasks.

In response to the recommendations made by the OIG in this report, EPA respectfully offers the following:

Recommendation 1: *Review the modified National Pollutant Discharge Elimination System mining permits issued by West Virginia based on the 2019 revisions to its National Pollutant Discharge Elimination System program to ensure that no backsliding has occurred, including for discharges of ionic pollution, in accordance with EPA Region 3's approval letter dated March 27, 2019. If a permit does not contain record documentation for the reasonable potential analysis or otherwise allows backsliding, alert West Virginia of the permit inadequacies*

Response to Recommendation 1:

- a. **Discretionary review of previously modified permits.** In response to Recommendation 1, Region 3 will perform a review of 5% (14-15) of the 286 previously-modified permits. Region 3's review will focus on how WVDEP determined whether there is a reasonable potential (RP) for the discharge to cause or contribute to an excursion from water quality standards and backsliding. Region 3's review will allow us to understand the process that WVDEP followed to comply with the Clean Water Act's (CWA) prohibition against backsliding. It also will allow Region 3 to confirm our understanding that WVDEP followed

essentially the same process for each of the 286 permits. Region 3 will communicate the results of this review and any recommendations to WVDEP.

- b. **Incorporation of previously-modified permits into ongoing Permit Quality Review.** In June 2020, Region 3 initiated a regularly-scheduled Permit Quality Review (PQR) of West Virginia's NPDES permitting program. As a general matter, EPA uses the PQR process as a supplement to the permit-by-permit oversight provided pursuant to Section 402(d) of the CWA to assess on a more programmatic level whether a state's permits meet applicable requirements of the CWA and NPDES regulations. The NPDES PQR consists of an evaluation of a select set of permits representing a cross-section of the state's permitting authority and may also include additional permits for Regional and National topic areas. EPA also reviews a state's implementing procedures. The PQR process serves on a programmatic level to promote NPDES permit quality, ensure consistency with NPDES program requirements, and identify whether NPDES permits are keeping pace with developments in the NPDES program regulations. As initially planned, the WV PQR would have included review of 10 state-issued NPDES permits for different sectors including municipal, industrial, and stormwater discharges and 15 mining program-specific NPDES permits.

In addition to its original planned review, Region 3 will add to the ongoing PQR review the three permits that were the subject of EPA's July 2019 comment letters. This will give us an understanding of the process and analysis undertaken by WVDEP in connection with issuance of a sample of the mining permit modifications, including but not limited to, reasonable potential analysis and any backsliding analysis. This review also will allow us to better understand how WVDEP responded to Region 3's comments on the draft permits. (The three permits to be evaluated for the PQR are separate from, and in addition to, the review of 14-15 of the 286 permits proposed above.) At the same time, we will use the ongoing WV PQR to confirm with WVDEP our understanding that WVDEP applied its 2012 Permitting Guidance for Surface Coal Mining Operations to Protect West Virginia's Narrative Water Quality Standards (2012 Permitting Guidance) and performed essentially the same type of analysis in connection with each of the 286 modifications. Consistent with the PQR standard operating procedures, Region 3 will develop a report that documents the findings and includes action items for WVDEP to address any deficiencies and, where resolved during the PQR process, their resolution. Through this process, Region 3 will work with WVDEP to identify opportunities to improve their NPDES program and resolve any issues identified.

Recommendation 2: *Review the modified National Pollutant Discharge Elimination System mining permits issued by West Virginia based on the 2019 revisions to its National Pollutant Discharge Elimination System program to determine whether the permits contain effluent limits for ionic pollution and other pollutants that are or may be discharged at a level that causes, has the reasonable potential to cause, or contributes to an excursion above any applicable water quality standard, as required by CWA regulations. If a permit lacks required effluent limits, take appropriate action to address such deficiencies.*

Response to Recommendation 2:

In response to Recommendation 2, Region 3 notes that WV does not currently have a numeric water quality criterion for ionic pollution. Consequently, the effects of ionic pollution in a discharge are appropriately addressed through ensuring that the discharge will not cause or contribute to an excursion from WV's narrative water quality criterion (40 C.F.R. § 122.44(d)(1)((vi); see also *id.* § 131.11(b)(2) (narrative criteria may be developed to supplement

numeric criteria)). While the WV PQR offers an opportunity to address issues at a programmatic level, Region 3 will also undertake a review of WVDEP's process as expressed in their 2012 Permitting Guidance for ensuring that mining discharges do not cause or contribute to excursions from the narrative water quality criterion. WVDEP's process involves the application of their 2012 Permitting Guidance to outfalls with continuous discharges and assumes no reasonable potential from precipitation-driven discharges. Now that nearly two permit cycles have passed and data is available, Region 3 believes it can effectively address Recommendation 2 by evaluating whether the data confirm assumptions that underly the 2012 Permitting Guidance and demonstrate that application of that 2012 Permitting Guidance has yielded permits that effectively implement WV's Narrative Water Quality Standards.

Region 3's evaluation will involve the review of data generated from permits developed by WVDEP using the 2012 Permitting Guidance. EPA will select an appropriate number of permits issued from 2012 through 2020 and conduct a comparison of baseline conditions at the mine site (as provided in the original applications) with reported permit data which reflects the conditions during the permit term(s). We will provide the results of our evaluation and any recommendations to modify the guidance to WVDEP and will take this information into consideration in review of new incoming draft permits.

Although not undertaken specifically in response to the OIG's investigation, Region 3's ongoing (since January 2020) work with WVDEP to develop TMDL endpoints and a TMDL allocation process for biologically impaired streams where ionic toxicity has been identified as a primary stressor to aquatic life is consistent with Recommendation 2. Endpoint calculations are complete, and next steps involve TMDL modeling and allocation development while simultaneously working through an implementation strategy. This work is ongoing and funded by EPA (\$425,000) through a contract, with a planned completion date of December 31, 2021.

Recommendation 3: *Develop a formal internal operating procedure to facilitate timely permit reviews and transmission of EPA comments to states.*

Response to Recommendation 3:

In response to Recommendation 3, we will complete development of an internal state oversight real-time permit review process document that will outline roles and responsibilities, definitions, process steps, and timelines.

During the period of this investigation, Region 3 was already in the process of developing and testing an internal process for review of draft state NPDES permits. This internal process began in July 2019 and is still underway. Given the high volume of permits received by the Region for review (approximately 800-900 per fiscal year based on data from FY19-present) and the limited 30-day review period, timely screening and triage of all permits is an important element of this process. This internal review process includes timelines for each part of the permit review process, including draft permit submittal processing (day 3), initial screening, determining scope of review (day 7), performing detailed review (day 14), determining scope of comments (day 21), and completion of review. Upon completion of review, next steps may consist of: (1) No comment necessary based upon review; (2) Provide comments; (3) Request additional information pursuant to the regulations and the Memorandum of Agreement (MOA); or (4) Provide an objection. Each permit reviewer tracks permits through the review process using a visual workflow system. The internal review process and the timelines were developed through collaboration with management and permit reviewers. To ensure consistency, this process

includes time for management review and consideration by setting a milestone of 21 days for review of the permit, recommendation, and drafting of any comments.

In addition, in 2019, Region 3 developed Real-Time Review (RTR) documents with our authorized states. RTRs are reviews of selected draft NPDES permits that the state intends to issue and are conducted to ensure that state-drafted and issued permits meet CWA requirements. The RTR documents were based on a nationally consistent template and were adapted for each state. The documents describe the overall purpose of the RTR, and standards EPA considers during the review. They describe the processes that EPA and states agree to undertake for selecting permits to review, establishing timelines for review, tracking progress, and resolving disputes. These templates serve as a guide for collaboration with the states and to strengthen the transparency of the EPA's NPDES real-time review process. These RTR documents, together with our internal review process, will form the basis of a documented review process.

In the first quarter of FY 22, Region 3 plans to implement a new electronic permit tracking system, which will update our internal process for receipt, processing, and management of documentation for permits received for real-time review. We will use lessons learned from our internal review process together with information from the RTR documents and insights gained from implementation of the new system to refine and improve our current process.

No.	Recommendation	High-Level Intended Corrective Action(s)	Estimated Completion by Quarter and FY
1	Review the modified National Pollutant Discharge Elimination System mining permits issued by West Virginia based on the 2019 revisions to its National Pollutant Discharge Elimination System program to ensure that no backsliding has occurred, including for discharges of ionic pollution, in accordance with EPA Region 3's approval letter dated March 27, 2019. If a permit does not contain record documentation for the reasonable potential analysis or otherwise allows backsliding, alert West Virginia of the permit inadequacies.	<p>Region 3 will conduct limited-scope reviews of 5% of the 286 permits, focusing on RP analysis and backsliding, and will communicate results to WVDEP.</p> <p>We will also evaluate another 15 mining permits which are not part of the 286, as well as the 3 permits that were the subject of EPA's July 25, 2019 comment letters through the Permit Quality Review of West Virginia's NPDES permitting program.</p> <p>We will develop a PQR report that documents findings and action items to resolve any deficiencies.</p>	<p>Q1 FY22</p> <p>Q4 FY21</p> <p>Q2 FY22</p>
2	Review the modified National Pollutant Discharge Elimination System mining permits issued by West Virginia based on the 2019 revisions to its National Pollutant Discharge Elimination System program to determine whether the permits contain effluent limits for ionic pollution and other pollutants that are or may be discharged at a level that causes, has the reasonable potential to cause, or contributes to an excursion above any applicable water quality standard, as required by CWA regulations. If a permit lacks required effluent limits, take appropriate action to address such deficiencies.	<p>Develop scope of work for the project including timelines.</p> <p>Review data generated from permits issued pursuant to WVDEP's 2012 Permitting Guidance against baseline conditions to determine the permits' impact on water quality and whether the assumptions underlying that guidance are supported.</p> <p>Provide results of our evaluations and any recommendations to modify the guidance to WVDEP and take this information into consideration in review of new incoming draft permits.</p>	<p>Q4 FY21</p> <p>Q4 FY22</p> <p>Q1 FY23</p>
3	Develop a formal internal operating procedure to facilitate timely permit reviews and transmission of EPA comments to states.	<p>Implement new permit tracking system, which will update receipt, processing, and management of documentation for permits received for EPA real-time review.</p> <p>Develop a state oversight real-time permit review process document that outlines roles and responsibilities, definitions, process steps, and timelines.</p>	<p>Q1 FY22</p> <p>Q2 FY22</p>