

February 7, 2003

Mr. Chuck Yingling
Office of Water Management
Pennsylvania Department of Environmental Protection
Rachel Carson State Office Building
P.O. Box 8555
Harrisburg, PA 17105-8555

**Re: Proposed Total Maximum Daily Load (TMDL) for Catawissa Creek
Watershed, 32 Pa. Bull. 6003 (December 7, 2002)**

Dear Mr. Yingling:

Citizens for Pennsylvania's Future (PennFuture) thanks the Department of Environmental Protection (DEP) for the opportunity to submit the following comments on the Proposed Total Maximum Daily Load (TMDL) for the Catawissa Creek Watershed.

1. "Abandoned" Mine Discharges

The draft TMDL report states that "[a]ll impairments are a result of acid drainage from abandoned coal mines" (p. 1), and later explains that only those "discharges that are permitted or have a responsible party . . . are considered point sources." (p. 20) The description of all of the sources of impairment as "abandoned" coal mines with no associated "responsible party" may be inaccurate or misleading in two respects.

First, the draft TMDL report identifies several regulated mining operations in the Catawissa Creek watershed. (pp. 6-7 & Table 2) From the description of the drainage tunnels in the "Watershed Background" section, it appears possible that some of these regulated mines are located in the recharge area for one of the drainage tunnels, or in other words, that the mine is hydrologically connected to the tunnel. If a regulated mine contributes to the discharge from a drainage tunnel, then the mine operator may be responsible for treating the discharge from the tunnel. See 35 P.S. §§ 691.307(a), 691.315(a), 691.316; C&K Coal Co. v. DER, 1987 EHB 786, 789 ("liability for the treatment or abatement of an off-permit, pre-existing discharge may be imposed under § 315(a) of the Clean Streams Law where there is a hydrologic connection between the mining operation and the off-permit discharge"). To substantiate the classification of all of the pollution sources as "abandoned" mines, the draft TMDL report should demonstrate that no hydrologic connection exists between any of the regulated mining operations and any of the drainage tunnels.

Second, the Department should not assume that the tunnels themselves are abandoned. It is possible that an existing company is the successor in interest to the person or entity that originally built a particular tunnel. There also may be an owner(s) of record of the tunnel itself

or a larger interest in real property that includes the tunnel. Under the NPDES program and The Clean Streams Law, the owner or operator of a tunnel that adds pollutants to the waters of the Commonwealth must have a permit authorizing the discharge. See 33 U.S.C. §§ 1311(a), (g)(2), 1342(a), (b), 1362(14); 35 P.S. §§ 691.307(a), 691.315(a), 691.316; 25 Pa. Code § 92.3. See also Commonwealth v. Barnes & Tucker Co., 371 A.2d 461 (Pa. 1977). Again, the Department should conduct an exhaustive search for potentially responsible parties before characterizing all of these drainage tunnels as “abandoned.”

2. Sugarloaf Creek / Oneida #1 Treated Tunnel

The draft TMDL report should either demonstrate that Sugarloaf Creek is no longer impaired or include a determination of the load reductions necessary to alleviate any continuing impairment. It does neither.

Because the treatment system for the Oneida #1 Tunnel did not go on line until July 2001, PennFuture suspects that a new stream survey assessing its impact could not be performed before DEP prepared the Section 303(d) list submitted to EPA in September 2002, which continues to list 3.4 miles of the creek as impaired by mine drainage. The discussion of Sugarloaf Creek and the “Oneida #1 Treated Tunnel” on page 44 of the draft TMDL does not directly state that the stream now meets all applicable water quality standards. If it does not, then the TMDL must include a determination of the load reductions that are necessary to achieve all of the applicable standards, but no such determination is provided in the draft TMDL report.

Although the net alkalinity in the effluent from the passive treatment system for the Oneida #1 tunnel discharge indicates that Sugarloaf Creek should be meeting the instream criterion for pH, the discussion of the creek and the treatment system never mentions iron or the system’s iron removal efficiency. The description of the effluent suggests that the new passive treatment system may not be removing enough aluminum for the creek to satisfy the aluminum instream criterion at least 99 percent of the time. If that is true, then DEP must perform a load allocation or wasteload allocation for aluminum. In addition, if Sugarloaf Creek is not meeting the instream criteria for iron, DEP also must perform a similar allocation for iron.

3. Instream Water Quality Criteria for Iron

The “TMDL Endpoints” (p. 8) appropriately include the instream water quality criteria for both total recoverable iron and dissolved iron. These two criteria are not substitutable, “either/or” standards. They are legally independent in that each of them must be satisfied at least 99 percent of the time. See 25 Pa. Code §§ 93.7(a), 96.3(c). If a stream satisfies the total iron instream criterion but not the dissolved iron criterion, it is impaired, and the TMDL must determine the load reductions necessary to ensure compliance with the dissolved iron criterion.

DEP has reason to believe that some if not all of the impaired segments do not meet the instream criterion for dissolved iron. EPA’s TMDL guidance provides that “[a] TMDL must

identify the loading capacity of a waterbody for the applicable pollutant.” (EPA “Guidelines for Reviewing TMDLs under Existing Regulations Issued in 1992,” May 20, 2002, p. 2) Nevertheless, the draft TMDL report does not address dissolved iron loads or indicate whether achieving the load reductions necessary to attain the total iron instream criterion also would result in attainment of the instream criterion for dissolved iron. The draft report explains that “[t]he iron TMDLs are expressed as total recoverable as the iron data used for this analysis was reported as total recoverable.” (p. 8) In other words, because the monitoring data does not include dissolved iron concentrations, DEP is treating total recoverable iron as the one and only iron parameter and the one and only iron criterion that must be satisfied. The draft TMDL report therefore does not address dissolved iron or demonstrate that the instream criterion for dissolved iron will be achieved.

The shortcoming of the monitoring data, however, does not excuse DEP from addressing dissolved iron. The TMDL must demonstrate the load reductions necessary to satisfy all applicable water quality criteria. By impermissibly eliding over the regulatory independence of the dissolved and total iron criteria, and by failing to demonstrate what load reductions are necessary to achieve the instream criterion for dissolved iron, the draft TMDL report does not adequately address all applicable water quality standards.

It may be that through other monitoring data or documented relationships between the concentrations of total and dissolved iron in mine drainage, DEP can demonstrate, with a reasonable degree of confidence, that the necessary reductions in total iron loads identified in the draft TMDL report will result attainment of the dissolved iron instream criterion. Perhaps DEP cannot make this demonstration without further monitoring in the Catawissa Creek watershed that includes analysis of dissolved iron concentrations. One way or another, however, DEP must show what must be done in order to ensure that the impaired streams are no longer impaired by a well-known constituent of mine drainage, dissolved iron. As it stands, the draft TMDL report simply does not make this required showing.

4. Lack of an Implementation Plan

What will produce the considerable load reductions that the draft TMDL report says are necessary to achieve water quality standards? The “[t]wo primary programs” cited in the “Recommendations” section of the draft TMDL report are the NPDES permitting program and DEP’s “efforts to reclaim abandoned mine lands.” (p.11)

The draft report classifies all of the tunnel discharges, and indeed all of the loading sources in the entire Catawissa Creek watershed, as nonpoint sources (p. 20), which is why all of the permissible wasteloads are allocated through a Load Allocation. The NPDES permitting program, however, is limited to point source discharges. See 25 Pa. Code § 92.3. It is incongruous, if not disingenuous, to rely on a program that does not apply to nonpoint source discharges for the purpose of achieving reductions in loads from sources DEP has classified in the same document as nonpoint sources. Cf. EPA May 20, 2002 Guidelines, p. 4 (“When a TMDL is developed for waters impaired by point sources only, the issuance of a National

Pollutant Discharge Elimination System (NPDES) permit(s) provides the reasonable assurance that the wasteload allocations contained in the TMDL will be achieved.’)(emphasis added).

As for the various efforts to reclaim abandoned mine lands, the draft TMDL report gives no assurance that the programs will be able to make a significant dent in the watershed’s reclamation problem. The report states that DEP’s Bureau of Abandoned Mine Reclamation has “completed at least two restorations of abandoned mine land in the Catawissa Creek Watershed” in the more than twenty years that program has been in operation. (p. 11) The report does not estimate the percentage of the abandoned mine lands in the watershed that those two projects reclaimed. It also does not indicate the number of acres of abandoned mine land remaining in the watershed or the approximate cost of reclaiming those lands. It is well known that Pennsylvania annually receives about \$20-25 million for reclamation of abandoned mines from the federal Abandoned Mine Land Fund, but needs about \$15 billion to complete all the remaining reclamation work in the state. Even when these projects are augmented with Growing Greener grants and funding from other sources, as well as the reclamation being achieved through refuse bank reclamation operations or other remaining activities, it seems likely that it will be a long time before the reclamation of the abandoned mine lands described in the draft TMDL report is completed. Again, this assessment may be incorrect. Reclamation projects with significant loading benefits through infiltration reduction or other mechanisms could be on the horizon. But given the intense competition for scarce AML funds statewide, the draft TMDL report does not demonstrate that the second “primary program” will be able to contribute in the foreseeable future to achieving the necessary load reductions.

This discussion points to the overall problem of the lack of an implementation plan in the draft TMDL report. Although EPA says that it cannot disapprove a TMDL for “waters impaired only by nonpoint sources” for failure to provide a “demonstration of reasonable assurance that [Load Allocations] will be achieved,” (EPA May 20, 2002 Guidelines, pp. 4-5), the TMDL process obviously is a more meaningful exercise if such “reasonable assurance” is provided. Moreover, if DEP determines that there is a responsible party (or parties) for one or more of the discharges addressed by the draft TMDL report, then the relevant waters would be impaired by both point and nonpoint sources as classified by DEP. In that situation, EPA’s guidance states that “the TMDL should provide reasonable assurances that nonpoint source control measures will achieve expected load reductions in order for the TMDL to be approvable.” (EPA May 20, 2002 Guidelines, p. 4).

PennFuture by no means intends to slight the tremendous efforts of the Catawissa Creek Restoration Association and its consultants. It is a testament to Mr. Hedin and his firm, Mr. Wytovich, and all of the Association’s volunteers that they are undaunted by the flow and water quality measurements for the Audenried drainage tunnel discharge. But like the watershed’s potential abandoned mine land reclamation projects, these volunteer mine drainage treatment projects are part of an intense statewide competition for funding. Moreover, as the aluminum monitoring results for the Oneida #1 tunnel discharge appear to show, passive treatment systems may not achieve all of the load reductions that the draft TMDL report identifies as being necessary to achieve all applicable water quality standards.

Given all of the practical complications, it may be difficult for DEP to provide assurance that the necessary load reductions actually will be achieved. But it is misleading to suggest that the NPDES and abandoned mine land reclamation programs will take care of the contaminant loading problems in the Catawissa Creek watershed within any reasonable time frame. If the TMDL is to provide a meaningful, workable solution for the watershed's pollution problems, it should include a workable implementation plan.

Please feel free to contact me at 717-214-7920 if you have any questions about our comments.

Sincerely,

Kurt J. Weist
Senior Attorney
Harrisburg Office