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Mr. John W. Conrad, P.G.
Cambria District Mining Office
Pennsylvania Department of Environmental Protection
286 Industrial Park Road
Ebensburg, PA 15931

**Re: Draft Sulphur Creek and Otto Run Watersheds TMDL, Cambria County
36 Pa. Bull. 6733 (November 4, 2006)**

Dear Mr. Conrad:

Citizens for Pennsylvania's Future (PennFuture) submits these comments on the draft "Sulphur Creek and Otto Run Watersheds TMDL, Cambria County" prepared by the Pennsylvania Department of Environmental Protection (PADEP) and dated January 19, 2006 ("Draft TMDL"). PennFuture is a public interest membership organization dedicated to creating a just future in which the environment, communities, and the economy thrive. One focus of PennFuture's work is to improve and protect water resources and water quality across Pennsylvania through public outreach and education, advocacy, and litigation. As part of that work, PennFuture has submitted comments on a number of draft TMDLs for streams in Pennsylvania that are, like the Sulphur Run and lower Otto Run watersheds, impaired by mine drainage discharges.

There are three fundamental and related problems with the Draft TMDL. First, it classifies as "unpermitted" two treated, post-mining discharges of contaminated mine drainage that emanate from active, permitted mining operations, and that are (or should be) authorized by NPDES permits. Second, apparently as a result of misclassifying the two treated mine discharges as "unpermitted," the Draft TMDL erroneously fails to assign Waste Load Allocations (WLAs) to them, but instead implicitly classifies them as nonpoint source discharges and includes them in the Load Allocations (LAs) for the relevant stream segments. Third, the TMDL fails to provide the required "reasonable assurances" that the necessary load reductions, all of which are assigned to nonpoint source discharges, actually will occur, and therefore fails to satisfy the requirement of assuring that the relevant water quality standards will be attained.

- 1. The treated discharges from the permitted Cooney Bros. Coal Company mines are point source discharges that are, or should be, authorized by NPDES permits.**

The Watershed History section of the Draft TMDL states that "[t]wo sites were permitted in the Sulphur Creek Watershed: Cooney Brothers Coal Company, Inc. 11813039, Cooney

Brothers Coal Company, Inc. 11813040. Presently two treated, unpermitted discharges exist, one on each permit: the Krayn discharge and the Dunlo discharge, respectively.” (p. 6)

It is unclear why PADEP classifies these treated discharges as “unpermitted.” The two primacy surface mining permits (SMPs) listed in the Draft TMDL, along with the NPDES permits that constitute Part A of those SMPs,¹ were renewed on July 13, 2005. 35 Pa. Bull. 4245-46 (July 30, 2005). If the discharges are treated, the treated effluent presumably is, or should be, discharged pursuant to the authorization of the two NPDES permits. And regardless of whether the discharges from the treatment facilities are covered by a NPDES permit, they constitute point source discharges within the meaning of the Clean Water Act. See 33 U.S.C. § 502(6), (12), (14), (16). The Krayn and Dunlo discharges therefore should be classified as point source discharges in the final TMDL.

2. The TMDL must include Waste Load Allocations to the two point source discharges.

The discharge identified as “DUN1” on the maps in Attachment A to the Draft TMDL is in the “upland area or headwaters” of Sulphur Creek at the coordinates given for the “Krayn discharge” (40° 15’ 49” N, 78° 42’ 36” W). (Draft TMDL, p. 6) (It is unclear why the Krayn discharge, and not the Dunlo discharge, is denoted “DUN1”.) This discharge contributes to the Sulphur Creek headwaters segment, which is monitored at point MP170. The Draft TMDL indicates that load reductions of 99% for aluminum (141.7 pounds per day), 98% for manganese (128.8 pounds per day), and 95% percent for acidity (764.6 pounds per day) are required at MP170. The Draft TMDL does not include a WLA for this segment. It assigns the entire allowable load for each pollutant to nonpoint sources through a LA, and assigns all of the required load reductions to the nonpoint sources above point MP170.

A similar story applies to the discharge identified on Attachment A’s maps as “SED13,” which is roughly “2000 feet east of the village of Llanfair,” at the coordinates given for the “Dunlo discharge” (40° 16’ 48” N, 78° 43’ 05” W). (Draft TMDL, p. 6) This discharge appears to contribute to the segment of Sulphur Creek monitored at point SP28, which is the segment immediately downstream from the headwaters segment monitored at point MP170. Based on the wholly unsupported and unreasonable assumption that all necessary load reductions will occur at point MP170, the Draft TMDL indicates that load reductions of 91% for aluminum (26.86 pounds per day), 92% for iron (27.13 pounds per day) 82% for manganese (16.5 pounds per day), and 88% percent for acidity (457.9 pounds per day) are required for the segment between points MP170 and SP28. Once again, the Draft TMDL does not include a WLA for this segment. It again assigns the entire allowable load for each pollutant to nonpoint sources through a LA, and assigns all of the required load reductions for the segment to nonpoint sources between points MP170 and SP28.

¹ For SMP No. 11813039, the associated NPDES Permit is No. PA0125474. For SMP No. 11813040, the associated NPDES Permit is No. PA0125423.

In a TMDL, the allowable load from a point source discharge is supposed to be accounted for through a WLA, see 30 C.F.R. § 130.2(h), not through a LA, see 30 C.F.R. § 130.2(g). The TMDL for the Sulphur Creek watershed therefore must account for the pollutant loads from the treated Kravn and Dunlo point source discharges through WLAs assigned to each discharge. Indeed, the failure to allocate allowable load to each discharge through a WLA is the equivalent of establishing a WLA of zero pounds per day for each relevant pollutant, which in turn would require that the NPDES permits for the discharges contain “non-detect” effluent limitations prohibiting the release of any of the pollutants for which the relevant segment is impaired.² See 40 C.F.R. § 122.44(d)(1)(vii)(B) (incorporated into Pennsylvania law by 25 Pa. Code § 92.2(b)(14); Mountain Watershed Association and PennFuture v. Department of Environmental Protection and Kaiser Refractories, EHB Docket No. 2004-102-R (Opinion and Order on Motion for Partial Summary Judgment dated June 23, 2005), p. 3.

3. The TMDL fails to provide reasonable assurance for the assumed nonpoint source load reductions.

For TMDLs that include (or in this instance, should include) both WLAs to point sources and LAs to nonpoint sources, EPA’s TMDL 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, “Guidelines for Reviewing TMDLs under Existing Regulations Issued in 1992” (May 20, 2002), p. 4 (emphasis added). If the agency cannot provide “reasonable assurances” that load reductions assigned to nonpoint sources will be realized, it must further reduce the WLA(s) and tighten the enforceable effluent limits on the point source(s) in order to fulfill the requirement of ensuring that the overall load will be reduced below the level at which impairment of water quality standards begins. See 40 C.F.R. § 130.7(c)(1).

The “Recommendations” section of the Draft TMDL (pp. 13-24) repeats PADEP’s generic, boilerplate explanation that “[t]wo primary programs provid[e] [for] maintenance and improvement of water quality in the watershed,” the NPDES permitting program, and the state’s efforts to reclaim abandoned mine lands. (p. 13) The NPDES permitting program, however, is limited to point source discharges. See 25 Pa. Code § 92.3. By failing to include WLAs in the Draft TMDL and assigning all of the required load reductions to nonpoint sources, PADEP obviously is not relying on the NPDES program to attain any portion of the necessary load reductions.

That leaves the collection of abandoned mine reclamation programs. The related problems there, as in many Pennsylvania TMDLs, are: a) the failure to acknowledge the overwhelming demands made on the scarce reclamation program resources; and b) the inability to provide any specific information that would cause a reasonable person to conclude that projects will be performed and pollutant loads will be reduced in the Sulphur Creek or Otto Run watersheds in the reasonably foreseeable future.

² The NPDES permits already prohibit a discharge with net acidity. For the Kravn discharge into the Sulphur Creek headwaters, the NPDES permit also would have to prohibit the discharge of both aluminum and manganese. For the Dunlo discharge into the downstream segment monitored at SP28, the NPDES permit would have to prohibit the discharge of aluminum, iron, and manganese.

PADEP has stated that \$15 billion or more in abandoned mine reclamation work remains to be completed in Pennsylvania. In light of that \$15 billion demand and the comparatively tiny amount of reclamation funding that becomes available each year, it clearly would be unreasonable to believe that Pennsylvania's abandoned mine reclamation programs provide assurance that all excess nonpoint source loads will be eliminated from mine drainage impaired streams across the Commonwealth. But that is the weight PADEP's generic mine drainage TMDL "Recommendations" section demands those programs to bear, without providing a scintilla of evidence that the programs have sufficient resources to achieve all the load reductions across the Commonwealth that PADEP relies on them to provide. When all of the TMDLs relying on those reclamation programs to provide nonpoint source load reductions, plus the future TMDLs that will rely on those same programs for additional load reductions, are viewed collectively, it becomes clear that the programs are unable to provide reasonable assurance that all of the nonpoint source load reductions attributed to them actually will occur.

The generic nature of the Draft TMDL's discussion of the various abandoned mine reclamation programs, and its failure to mention the Sulphur Creek Restoration Project, shows that the state's abandoned mine reclamation efforts, while having good effects in general, do not provide assurance that reduction of mine drainage pollutant loadings are in the offing for the Sulphur Creek and Otto Run watersheds. The "Sulphur Creek Restoration Final Report" (July 24, 1998) available on PADEP's web page indicates that of the eight work sites identified in the report, one (Work Site No. 2) had been eliminated because Cooney Bros. Coal Company had been found liable for treating the discharge, and only two others (Nos. 3 and 4) had received funding. According to the Final Report, "[f]unding for the remaining worksites is dependent on the success of the pilot project" for treating the voluminous (1,000-1,900 gallons per minute) and highly contaminated discharge emanating from an artesian borehole into the Yellow Run Coal Co. deep mine, which is identified as Work Site No. 1 in the 1998 Final Report, and as "BH – Large artesian borehole" in the 2006 Draft TMDL. The 1998 Final Report states: "Remediation at the other work sites would improve Sulphur Creek, but the amelioration of the borehole is the key project in this watershed. It would be of almost no consequence to improve Sulphur Creek upstream of this discharge if the discharge itself is not successfully improved."

Treatment of the Yellow Run deep mine artesian borehole discharge thus is the key to obtaining the necessary point source load reductions in the Sulphur Creek and Otto Run Watersheds. The Draft TMDL, however, provides no suggestion, much less assurance, that a system for treating that discharge will be constructed, or that a passive treatment system (as contemplated by the 1998 Sulphur Creek Restoration Final Report) will be capable of achieving the huge load reductions needed to attain the instream water quality criteria: 97 percent for aluminum, 99 percent for iron, 95 percent for manganese, and 100 percent for acidity. (Draft TMDL, Table 3, pp. 10-11) The Draft TMDL does not indicate whether the "pilot project" for evaluating the possibility of passively treating the borehole discharge was funded, or whether that pilot project was successful. It also does not address whether, and if so, when, the second phase of the Work Site No. 1 project – the design and construction of a passive system for treating the artesian borehole discharge – will be funded and completed. The statement from the 1998 Final Report quoted at the end of the preceding paragraph suggests that the four remaining work sites (Nos. 5 through 8) will remain unaddressed until the artesian borehole discharge is treated.

In order to provide the required “reasonable assurances” of load reductions occurring in a specific watershed, PADEP must do more than list programs that might, at some unspecified time in the future, support projects that might reduce the loadings from nonpoint sources. Instead, it must identify specific projects, provide reason to believe that those projects will occur, and provide reasonable estimates of the loading reduction benefits of those specific projects. As indicated in the preceding paragraphs, the Draft TMDL falls far short of providing this kind of reasonable assurance. In fact, the only watershed-specific information in the “Recommendations” section of the Draft TMDL runs counter to notion that nonpoint source loads to Sulphur Creek or lower Otto Run will be reduced in the foreseeable future:

There is currently no watershed group focused on the Sulphur Creek and Otto Run Watershed area. It is recommended that agencies work with local interest to form a watershed organization. This watershed organization could then work to implement projects to achieve the reductions recommend in this TMDL document.

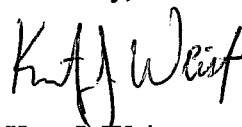
(Draft TMDL, p. 14) If such a chain of hypothetical events, including the completion of a challenging and essential treatment project that apparently remains unfunded, satisfies the “reasonable assurances” requirement, that requirement is meaningless.

Summary

PADEP must revise the Draft TMDL by classifying the discharges of treated mine drainage from permitted mine sites as point source discharges and assigning them WLAs. In doing so, however, PADEP may not automatically allocate the current permitted load to these discharges and require all of the load reductions to come from the nonpoint sources. Instead, it must require the point sources to contribute to the considerable load reductions required in both of the relevant segments of Sulphur Creek.

Thank you for your consideration of these comments. You may reach me at 717-214-7920 if you have any questions.

Sincerely,



Kurt J. Weist
Senior Attorney
Harrisburg Office

cc: Will Brown, Division of Watershed Protection, Bureau of Watershed Management
Michelle M. Moses, Bureau of Regulatory Counsel