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July 1, 2011

Via First-Class Mail

Michael Krancer,
Secretary
Pennsylvania Department of Environmental Protection
Rachel Carson State Office Building
P.O. Box 2063
Harrisburg, PA 17105-2063

RECEIVED

JUL - 5 2011

ENVIRONMENTAL QUALITY BOARD

Re: Petition to Adopt New Regulation

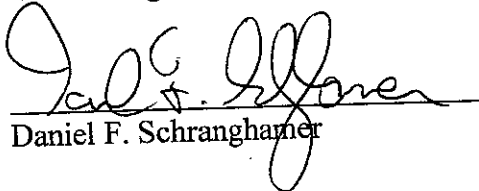
Dear Secretary Krancer,

Please find enclosed a Petition Form to the Environmental Quality Board regarding the adoption of a new regulation. Please have your office time-stamp the second copy of the Petition Form and return it to me in the self-addressed, stamped envelope that I have enclosed.

Thank you for your attention to this matter. If you have any questions, comments, or concerns, please do not hesitate to contact me.

Very truly yours,

GSP Management Co.


Daniel F. Schranghamer

enclosures

cc: Frank T. Perano

C. Describe the types of persons, businesses and organizations likely to be impacted by this proposal.

All NPDES permittees subject to cause/effect stream surveys by the Department.

D. Does the action requested in the petition concern a matter currently in litigation? If yes, please explain.

Yes. A declaratory judgment was sought in Commonwealth Court to require the Department to utilize its published "Cause/Effect Protocol" when conducting cause/effect stream surveys. The Department moved to have the action dismissed because the Department did not believe Commonwealth Court was the proper forum. The Department also argued that the Cause/Effect Protocol is merely a policy statement and, therefore, not enforceable. In filing this petition, Mr. Perano is acting in accordance with the Department's arguments by seeking to have the Cause/Effect Protocol codified as a regulation by the entity with the authority to promulgate regulations.

E. For stream redesignation petitions, the following information must be included for the petition to be considered complete. Attach supporting material as necessary.

1. A clear delineation of the watershed or stream segment to be redesignated, both in narrative form and on a map.
2. The current designated use(s) of the watershed or segment.
3. The requested designated use(s) of the watershed or segment.
4. Available technical data on instream conditions for the following: water chemistry, the aquatic community (benthic macroinvertebrates and/or fishes), or instream habitat. If such data are not included, provide a description of the data sources investigated.
5. A description of existing and proposed point and nonpoint source discharges and their impact on water quality and/or the aquatic community. The names, locations, and permit numbers of point source discharges and a description of the types and locations of nonpoint source discharges should be listed.
6. Information regarding any of the qualifiers for designation as high quality waters (HQ) or exceptional value waters (EV) in §93.4b (relating to qualifying as High Quality or Exceptional Value waters) used as a basis for the requested designation.
7. A general description of land use and development patterns in the watershed. Examples include the amount or percentage of public lands (including ownership) and the amount or percentage of various land use types (such as residential, commercial, industrial, agricultural and the like).
8. The names of all municipalities through which the watershed or segment flows, including an official contact name and address.
9. Locational information relevant to items 4-8 (except for contact names and addresses) displayed on a map or maps, if possible.

All petitions should be submitted to the
Secretary of the Department of Environmental Protection
P.O. Box 2063
Harrisburg, PA 17105-2063

Attachment A

II(B) Why is the petitioner requesting this action from the Board?

Simply put, Mr. Perano is requesting this action from the Board because the Department has for years been employing informal stream surveys as enforcement tools against NPDES permittees. While Mr. Perano agrees it is appropriate for the Department to conduct biological investigations of receiving streams, the Department must be required to utilize some form of objective, scientifically-defensible methodology. At the current time, the Department's biologists are conducting informal stream surveys based solely on their own professional judgment and not on any objective criteria. The results of these informal stream surveys, however, often differ markedly from the results of objective stream surveys performed in accordance with the Department's own published methodologies. Mr. Perano, therefore, is requesting that the Board promulgate the regulation attached to this petition as Attachment B.

1. Background

On June 26, 1991, the Department entered into a Memorandum of Agreement ("MOA") with the Environmental Protection Agency, Region III ("EPA"), related to the Commonwealth's authority to enforce the federal Clean Water Act's NPDES permitting program. A copy of the MOA is attached hereto as Exhibit 1. Through the MOA, the Department became the state agency authorized to enforce and implement the NPDES permitting program in accordance with the federal Clean Water Act and the Pennsylvania Clean Streams Law.

Pursuant to its delegated enforcement authority under the NPDES permitting program, the Department drafted the document "Guidelines for Identifying, Tracking and Resolving Violations for Water Quality," Document Number 362-4000-006 (the "Guidelines"). A copy of the Guidelines is attached as Exhibit 2. The Guidelines state that the water quality program "will

follow the Department-wide policy regarding identifying, tracking and resolving violations” and that they apply to any Water Quality staff in the Department involved with the compliance and enforcement of applicable water quality requirements. The Guidelines identify several different types of NPDES inspections that can be conducted by Department staff of NPDES-permitted facilities. These inspections include case specific stream surveys, which the Guidelines describe as follows:

This involves biological and chemical sampling for the purpose of evaluating the effect in detail of a specific discharger on the receiving waters. Examples of when such surveys are conducted include when intermittent pollution is suspected to evaluate damage after a pollution incident or to evaluate the adequacy of permit effluent limitations. A CSI or CEI conducted along with the survey should be considered.

See, Exhibit 2, pages 1-2.

The Department has, under oath, identified the document “Cause/Effect Surveys,” Document ID No. 391-3200-003, (the “Cause/Effect Protocol”) as the *only* policy or guidance document that concerns the performance of stream surveys done in connection with inspections of small flow sewage treatment plants discharging to unnamed tributaries. A copy of the Cause/Effect Protocol is attached as Exhibit 3. The published Cause/Effect Protocol states that it “provides the established procedures, as federally required, to conduct cause/effect surveys.” The Cause/Effect Protocol further states that it “was developed, as federally required, to establish and standardize the Department’s procedures for conducting cause/effect surveys.” The Cause/Effect Protocol further states that it “applies to DEP staff that is conducting cause/effect surveys.”

Attachment 1 to the Cause/Effect Protocol, entitled "Cause and Effect Survey Field Collection Methods," states that "[t]his protocol was developed to establish and standardize cause and effect survey procedures and provide guidance to DEP staff for conducting such surveys." Attachment 1 goes on to state that benthic macroinvertebrate samples are collected utilizing methods detailed in the Department's Standardized Biological Field Collection and Laboratory Methods, Document No. 391-3200-015 (the "Field Collection Methods"). A copy of the Field Collection Methods is attached as Exhibit 4. The Field Collection Methods specifically states that it "provides the established procedures to collect and process aquatic biological field data for lakes and streams data," and that it was "developed to establish and standardize DEP's procedures for aquatic biological data collection methods."

The Department has also developed the document "An Index of Biotic Integrity for Wadeable Freestone Riffle-Run Streams in Pennsylvania" (the "IBI document") as a "scientifically credible biological assessment tool." A copy of the IBI document is attached as Exhibit 5. The IBI document measures the extent to which anthropogenic stresses, such as point-source discharges, impair the capability of a stream to support a healthy aquatic community. The Department has incorporated the IBI document into its "Instream Comprehensive Evaluation Surveys," Document No. 391-3200-001, to analyze the benthic macroinvertebrate population collected during an instream survey.

2. Department biologists are not following the Cause/Effect Protocol or Field Collection Methods.

Despite the existence of the Guidelines, Cause/Effect Protocol, and IBI document, the Department continues to utilize informal cause-effect surveys as an enforcement tool against NPDES permittees. Department biologists have even testified under oath that they are guided more by professional discretion than any guidelines or protocols and that to the extent there are

guidelines regarding stream surveys, they do not have to follow those guidelines. Department biologists have also testified that they do not adhere to the Department's published methodologies because they are too time consuming.

3. The Department's published methodologies yield different results than the informal stream surveys conducted by the Department's biologists.

The Department's biologists have admitted under oath that the published Cause/Effect Protocol, Field Collection Methods, and IBI document are more rigorous protocols than the informal stream surveys they actually perform. They have also admitted that these published methodologies are more "precise." The marked difference between the informal stream surveys the Department's biologists are performing and the more rigorous published methodologies is significant because the Department routinely utilizes its informal stream surveys as the basis for enforcement actions against NPDES permittees, support for civil penalty assessments, and decisions regarding whether to grant or deny an NPDES permit application.

The biggest distinction between the Department's informal stream surveys and stream surveys utilizing the Department's published methodologies is simple: the Department's published methodologies result in an objective, quantifiable comparison between two or more locations in a receiving stream, while the Department's informal stream surveys do not. As a result, Robert Schott, a Department biologist held out by the Department as an expert on the preparation of stream surveys, testified under oath that the Department's published methodologies were more "precise" than the stream surveys performed by the Department's biologists.

The informal stream surveys routinely conducted by Department biologists are so imprecise because they are based on a subjective determination of the relative abundance of benthic macroinvertebrates at two points and, therefore, only result in a subjective, non-

quantifiable comparison between two points based primarily on a biologist's experience. Based on the organisms found in stream, the Department biologist categorizes each taxa as "rare," "present," "common," or "abundant." A February 1, 2010, informal stream survey report is attached as Exhibit 6. Each category, in turn, represents a range of numbers: taxa are considered to be "rare" if there are less than three; "present" if there are 3 to 9; "common" if there are 10 to 24; and "abundant" if there are 25 to 99. *Id.*, Table 2. The Department's biologists, however, do not distinguish between where in each range the number of taxa fall. Put another way, if one taxa is considered to be common and another taxa is considered to be abundant, the difference in the number of organisms could be as small as 1 or as large as 89. No further analysis is made on the meaning of these numbers, except for the biologist's subjective opinion. In this February 1, 2010, report, for example, the Department's biologist offered the following subjective opinion: "The results of this study indicate the PHMHP discharge is having a negative effect on the quality of the stream. While pollution tolerant macroinvertebrates were observed at both sites, the most tolerant organisms, such as aquatic worms, flatworms, and blackflies, were more prevalent at the downstream site." *Id.* No attempt was made to offer an objective, quantifiable, comparison between the two populations.

The Department's published methodologies, in contrast, rely on specific counts, i.e. exactly how many organisms are found at each location, to develop a specific IBI number for each sampling location that describes the relative health of the UNT at that location. This objective rating can be compared from point to point, either in the same watershed or in different watersheds. Using pre-determined values and equations, all of which have already been approved by the Department, the IBI score is the average of six separate objective metrics. A May 21, 2010, Aquatic Assessment Report based on a January 28, 2010, aquatic assessment

utilizing the Department's published methodologies is attached hereto as Exhibit 7. This aquatic assessment compared, using objective, quantifiable criteria, three separate locations in the UNT and proved that the UNT was impaired along its entire length. It also proved, using those same objective, quantifiable criteria, that elimination of the discharge would not return the UNT to an unimpaired state.

The Department is certainly capable of performing stream surveys using its own published methodologies. A March 2, 2011, report based on a November 29, 2010, aquatic assessment utilizing the Department's published methodologies is attached hereto as Exhibit 8. This assessment found, in contrast to the February 1, 2010, informal stream survey (Exhibit 6), that the benthic macroinvertebrate population did not show an adverse impact to the receiving stream. In other words, the objective, scientifically-defensible stream survey conducted with the Department's published methodologies reached a completely different conclusion than the informal stream survey performed several months earlier.

4. The Reasons for the Proposed Regulation.

The heart of this matter is that the Department is not following an objective, scientifically-defensible, standardized protocol and, therefore, not operating an effective compliance monitoring program. Because the Guidance, Cause/Effect Protocol, and IBI document are mere "guidance documents" and not promulgated regulations, the Department is free to ignore them in conducting case specific stream surveys.

Unfortunately, the Department is relying on its informal stream surveys to "show" that a permitted discharge is causing damage to a receiving stream. Based on these informal stream surveys, the Department is issuing NOVs, assessing civil penalties, and even denying permit renewal applications. Promulgating the regulation requested in this petition will provide a clear

and structured process for the Department's inspectors to follow when conducting case specific stream surveys, create confidence and provide due process for permittees, and comply with Department's obligation under the MOA.

5. The Proposed Regulation Incorporates by Reference Several Existing Guidance Documents.

The proposed regulation incorporates by reference several existing guidance documents. Incorporating by reference specific, existing publications is well-supported by current regulations in a number of fields. For example:

- 25 Pa.Code Section 250.4 mandates the use of the most current versions of both EPA RCRA Manual SW-846 (U.S. EPA, 1990. *Test Method for Evaluating Solid Waste, Physical/Chemical Methods*. Third Edition. Office of Solid Waste and Emergency Response) and *Methods for the Determination of Organic Compounds in Drinking Water* (U.S. EPA, 1988, Environmental Monitoring Systems Laboratory, EPA/600/4-88/039).
- 25 Pa.Code Section 250.304 mandates the use of Drinking Water Standards and Health Advisories, EPA Office of Water Publication No. EPA 822-R-09-011 (October, 2009).
- 25 Pa.Code Section 109.503 mandates the use of the Department's "Public Water Supply Manual" in the design of public water supply systems.

This proposed regulation, therefore, is sufficiently specific to inform the regulated community about the binding requirements for conducting stream surveys.

6. The Changes Requested in this Petition.

In this Petition, Mr. Perano asks the Environmental Quality Board to codify into regulation the most current versions of the Department's existing guidance documents for purposes of conducting stream surveys, discussed above:

- "Cause/Effect Surveys," Document ID No. 391-3200-003.
- "Standardized Biological Field Collection and Laboratory Methods," Document No. 391-3200-015.
- "An Index of Biotic Integrity for Wadeable Freestone Riffle-Run Streams in Pennsylvania."

7. The Legal Authority for this Petition.

Mr. Perano is filing this petition pursuant to Section 1920-A of the Administrative Code of 1929 (71 P.S. §510-20(h)). The Environmental Quality Board possesses the authority to promulgate the proposed regulation pursuant to section 5(b)(1) of the Clean Streams Law (35 P.S. §§691.5(b)(1)) and section 1920-A of the Administrative Code of 1929 (71 P.S. §510-20).

Attachment B

Proposed Regulatory Language

25 Pa. Code Chapter 92a. National Pollutant Discharge Elimination System Permitting, Monitoring and Compliance.

Subchapter D. Monitoring, Annual Fees, and Inspections.

Section 92a.64. Cause and Effect Stream Surveys.

- (a) All stream surveys conducted by Department for monitoring the effects of a discharge on the waters of the Commonwealth shall employ the procedures and standards specified by the most recent versions of the Department documents "Cause/Effect Surveys," Document ID No. 391-3200-003, "Standardized Biological Field Collection and Laboratory Methods," Document No. 391-3200-015, and "Index of Biotic Integrity for Wadeable Freestone Riffle-Run Streams in Pennsylvania."
- (b) The Department will make available to the permittee the Cause/Effect Surveys, the Standardized Biological Field Collection and Laboratory Methods, and the Index of Biotic Integrity for Wadeable Freestone Riffle Run Streams in Pennsylvania available from the Bureau of Water Standards and Facility Regulation, Post Office Box 8774, Harrisburg, Pennsylvania 17105 which provides the established procedures, as federally required, to conduct cause/effect surveys.