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Via Electronic Mail: [RegComments@state.pa.us](mailto:RegComments@state.pa.us)  
Environmental Quality Board  
Pennsylvania Department of Environmental Protection  
P.O. Box 8477  
Harrisburg, PA 17105-8477

RE: Pennsylvania Department of Environmental Protection Environmental Quality Board (EQB) proposed amendments to the regulations on Oil and Gas Casing and Cementing, 25 Pa. Code Chapter 78.

Dear Members of the Environmental Quality Board:

Trout Unlimited (TU) and the Pennsylvania Council of TU appreciate the opportunity to comment on the Pennsylvania Department of Environmental Protection (DEP) Environmental Quality Board's (EQB) proposed amendments to the existing requirements related to drilling, casing, cementing, testing, monitoring and plugging of oil and gas wells, and the protection of water supplies. TU agrees with and commends the DEP's decision to add specificity to the regulations to ensure protection of public health, safety and welfare. However, in order to meet the goal of being protective of public and private water supplies, we recommend that more detail and clarity be added to the proposed regulations before adoption by the EQB.

Please find below TU's recommendations for specific additional revisions to the EQB's proposed oil and gas well amendments to 25 Pa. Code Chapter 78.

**§ 78.51: Protection of water supplies**

TU supports the EQB's intent to clarify the requirements for operators to restore or replace a water supply that has been polluted or diminished as a result of oil or gas drilling under §78.51 (d). Ensuring that the replaced or restored water supply is reliable and does not require excess operation or maintenance costs by the affected parties is an appropriate burden for a polluter to bear. Section §78.51(d)(2) reads: "The quality of a restored or replaced water supply will be deemed adequate if it meets the standards

established pursuant to the Pennsylvania Safe Drinking Water Act (35 P.S. §§ 721.1-721.17), *or is comparable to the unaffected water supply* (emphasis added) if that water supply did not meet those standards.” In the introduction of this proposed rulemaking, the EQB states that the additional requirements imposed by these regulations will provide an increased degree of protection for both public and private water supplies. Allowing a well operator to replace a water supply with a source that does not meet drinking water standards is unjust and will not provide increased levels of protection for Pennsylvania’s water supplies. TU recommends that any replacement of a water supply should meet standards established pursuant to the Pennsylvania Safe Drinking Water Act, regardless of whether the water supply prior to contamination met those standards.

While we support the addition of subsection §78.51(h), and the requirement that an operator who receives notice that a water supply has been affected by pollution or diminution must provide notification to DEP, we disagree with the 10-day timeframe established for notification to DEP. Exposing members of the public to the risks associated with a polluted drinking water supply for 10 days is not only unnecessary, but it is contrary to the aforementioned intent of these regulations. We urge you to shorten the time period for notification to 24 hours – a more reasonable timeframe in which to respond to concerns affecting the safety of public and private water supplies. In addition, we also recommend that §78.51(h) include a provision requiring an investigation by DEP, within a comparable timeframe, to determine if the operation that was the source of the pollution should be shut down or if another remediation option is available.

In the interest of protecting private and public water supplies, TU recommends that §78.51 be amended to include a provision that requires a well operator, who has received notice from a landowner, water purveyor or affected person that a water supply has been affected by pollution or diminution, to provide a temporary water supply within 24 hours of being notified by the affected party. Further, if after investigation DEP determines that the drilling, alteration or operation activities of the well operator is the cause of pollution to the water supply, then such operator should be required to permanently restore or replace the water supply within ten days of such determination. Neither the existing regulations, nor the proposed regulations, prescribe that the affected party be supplied with either a temporary or permanent water supply within a specified timeframe.

#### **§ 78.52: Pre-drilling or pre-alteration survey**

TU supports the proposed revision to § 78.52, which requires a well operator to complete a pre-drilling survey to collect baseline information about the quality of water before drilling and any known impacts, in order to overcome the presumption of liability if a water source is contaminated in the future. However, we do not agree with § 78.52 as written, which makes the pre-drilling survey optional rather than mandatory. In order to protect water supplies and to understand how drilling can impact water

resources, DEP and the public need baseline information about the quality of the water supply prior to any drilling. The pre-drilling survey requirement can protect the well operator from liability by providing a defense under §208(d)(1) of the Oil and Gas Act, but the pre-drilling survey should above all other purposes, be designed to protect the public health, safety and welfare – which is the stated purpose of these proposed amendments. As such, TU recommends that a pre-drilling survey be required prior to the issuance of any drilling permit and the survey results be made available to the public before drilling begins.

Section 78.52 should include specific standards that describe the types of tests that need to be conducted, over what time frame and during what season. DEP should establish a minimum set of water quality tests and procedures for the pre-drilling survey, including, but not limited to: baseline testing over full hydrologic cycle (in various seasons); general quality assurance/quality control protocols; testing for chemicals used in oil and gas activities; identification of pre-existing industrial contaminants; and if contamination is found, the extent to which the contamination exceeds Pennsylvania's SDWA standards. This information should be made available to all relevant agencies and to the public prior to the issuance of any drilling permit.

#### **§ 78.73: General provisions for well construction and operation**

We support the explicit language of §78.73, requiring operators to maintain the integrity of a well throughout construction and operation to protect public health and safety from gas migration and other pollution to fresh groundwater supplies. Specific methods for meeting the requirements of this section are suggested in subsections (c) and (d). Yet, section 78.38 does not require the operator to notify DEP of problems identified, or of its solution, or to notify anyone whose water supply may be impacted. Thus, the operators remain accountable only to themselves and not to the DEP or the public. The current language and requirements of this section do not meet the EQB's stated goal of protecting public health, safety, environment and property. To protect public health, DEP should be notified within 24 hours so that prompt notification can be given to the affected members of the public. In the event of pollution or diminution of a water supply, the well operator should be required to develop a plan for the remediation of its contamination and that plan should ultimately be subject to DEP approval. A transparent process that allows the public access to information about the quality of their drinking water is a key component to protecting public and private water supplies and stemming threats to public health and safety.

#### **§78.81, *et seq.*: Casing and cementing**

TU supports the additional requirements in this section of the proposed rulemaking that incorporate the best management practices used by the industry. We urge the EQB to further explore and incorporate additional appropriate best management practices, as identified by the American Petroleum Institute (API) and other states, into this proposed rulemaking. Regulations in §78.81, *et seq.* must be stringent and must reflect the best

management practices that assure proper casing and cementing of an oil or gas well to protect fresh groundwater supplies and the public health, safety, and welfare.

**§ 78.83a: Casing and cementing plans**

In the “Background of the Proposed Rulemaking” section of this proposed rulemaking, published on Saturday, July 10, 2010 [40 Pa.B. 3845], the EQB unambiguously acknowledges that if a well is not properly constructed or operated, there could be potential for fire or explosion posing a threat to public health, safety and welfare. The newly proposed §78.83a requires the operator to prepare and maintain a casing and cementing plan including details on how the well will be drilled and completed. The operators are merely required to make the plan available for review by the DEP. Since the casing and cementing plan defines the processes that DEP has acknowledged are most likely to impact public and private water supplies, it should be subject to DEP approval as part of the well permit application. A well should not be permitted to be drilled until DEP approves of and signs off on the cementing and casing plan.

**§ 78.88(a): Mechanical integrity of operating wells**

TU supports the addition of section 78.88(a) which requires operators to conduct inspections and verify the operating condition of a well. This section also requires operators to identify maintenance and repair needs and take action, if needed, to remedy any compromise in the integrity of the well. To ensure protection of public health and safety, routine inspections must be conducted to ensure that the well itself is operating properly and reliably. According to § 78.88(a), inspections must occur at least quarterly. TU recommends that inspections be mandated more frequently, at least on a monthly basis, if not weekly. Requiring well inspections to be conducted only on a quarterly basis will provide neither the operator, nor DEP, adequate time to respond to warning signs that could compromise the integrity of the well and consequently threaten public health and safety.

**§ 78.122(b)(6): Well record and completion report**

TU strongly supports the additional language added to § 78.122(b)(6), requiring a well operator to describe in its well record and completion report, the total volume and list of hydraulic fracturing chemicals used. As DEP is aware, the federal Energy Policy Act of 2005 exempted hydraulic fracturing from regulation under the Safe Drinking Water Act, leaving the responsibility to protect groundwater resources during natural gas drilling activities to the individual states. In order to understand the synergistic and cumulative impacts of using different toxic chemicals in the extraction of gas from the Marcellus Shale in Pennsylvania, these regulations must require disclosure of the concentration of chemicals used, in addition to the type and volume of chemicals, to provide DEP with a comprehensive picture of potential impacts.

In conclusion, while TU supports the DEP’s decision to add specificity to existing regulations related to well casing and cementing, we strongly urge DEP to consider the

enclosed recommendations that further clarify the proposed regulations and ensure that the greatest level of protection is applied to public health, welfare and safety. This is the first time since 1989 that Pennsylvania's oil and gas regulations related to well construction and water supply replacement have been updated and TU appeals to you to use this opportunity to create the most protective water supply standards possible.

It is the responsibility of the DEP to protect Pennsylvania's air, land and water from pollution and to provide for the health and safety of its citizens through a cleaner environment. To meet this mandate, DEP must put the public welfare before industry profit by requiring: (1) well operators to provide a water supply that meets drinking water standards if the pollution was a result of their operation; (2) well operators to notify the DEP of reports of pollution within 24 hours; (3) require well operators to conduct pre-drilling surveys to establish baseline water quality information and set standards for the pre-drilling survey; (4) well operators to notify DEP of problems with well integrity during construction and operation; (5) DEP approval of casing and cementing plans; (6) frequent well inspections; and (7) disclosure of the type, volume, and concentration of chemicals used during the hydraulic fracturing process.

Thank you for consideration of TU's comments. If you have any questions, please do not hesitate to contact me at 703.284.9437 or [emaclin@tu.org](mailto:emaclin@tu.org).

Sincerely,



Elizabeth Maclin



Dave Rothrock