



417 Walnut Street
Harrisburg, PA 17101-1902
717 255-3252 / 800 225-7224
FAX 717 255-3298
<http://www.pachamber.org>

March 25, 2008

The Honorable Kathleen McGinty
Secretary
Department of Environmental Protection &
Chairperson, Environmental Quality Board
Rachel Carson State Office Building, 16th Floor
400 Market Street
Harrisburg, PA 17101

Re: DEP Proposed Rulemaking: Triennial Review of Water Quality Standards

Dear Secretary McGinty:

On behalf of its 24,000 members and customers, representing the spectrum of Pennsylvania industry, business, and commercial enterprises, the Pennsylvania Chamber of Business and Industry appreciates the opportunity to provide comments concerning the DEP Proposed Rulemaking: Triennial Review of Water Quality Standards (Chapters 93 and 16).

The Chamber has specific concerns with the addition of molybdenum as a human health criteria to the water quality standards. PA DEP has proposed to add a Human Health Criteria for molybdenum of 210 µg/l.

Through discussions with members of DEP's Bureau of Water Standards and Facility Regulation, the Chamber understands that the molybdenum standard was developed as a result of an NPDES discharge permitting event for a single discharger in western PA. This is an inappropriate foundation for developing a statewide standard.

There is no drinking water standard or federal water quality standard for molybdenum. In correspondence between DEP and U.S. EPA (Moore, 11/29/2006), DEP cites section 16.32 of the PA Code for developing criteria for threshold level toxic effects for molybdenum. But in EPA's "National Recommended Water Quality Criteria, 2006", molybdenum is not listed as either a toxic pollutant or a non-priority pollutant. EPA correspondence to DEP (Hakowski, 6/7/2007) specifically acknowledges that molybdenum is not a carcinogen.



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DEP cites the use of the National Academies Press, "Dietary Reference Intakes for Vitamin A, Vitamin K, Arsenic, Boron, Chromium, Copper, Iodine, Iron, Manganese, Molybdenum, Nickel, Silicon, Vanadium, and Zinc (2000)", published by the Institute of Medicine (IOM) for establishing the water quality standard for molybdenum. This was an inappropriate and unintended use of this document. The purpose of this study was to establish Recommended Dietary Allowances (RDAs) for the nutrients cited in the document. It was not intended to be used to establish either drinking water standards or water quality standards. The study states that lack of molybdenum in the human diet leads to metabolic errors of several key enzymes, which result in neurological dysfunction and mental retardation. The study does establish Tolerable Upper Intake Levels (UL) for most of the nutrients in the study. According to the study, the UL is not a toxicity effect level, but rather an upper level of intake that can be tolerated biologically, and as a reference point to connote that intake levels above the UL will present *no beneficial effect to the individual*. From the study, the intent of the UL was to clearly communicate to individuals who take dietary supplements that "more is not better." It was not intended to establish toxic threshold levels. The UL for molybdenum is 2000 µg per day (2.0 mg per day). The UL for each nutrient is set to protect the most sensitive individuals.

The inappropriate use of the study and subsequent development of the draft molybdenum standard was clearly an eleventh-hour inclusion in the proposed triennial standards. This is reflected in the presentations of the draft standards to the Water Resources Advisory Committee (WRAC). Notably, the draft standards that were presented to WRAC on March 8 and October 13, 2006 did *not* include molybdenum. At the October 13 meeting, WRAC unanimously requested that DEP provide to the committee information where DEP proposed to deviate from EPA-published water quality criteria. The draft standards were presented a third and final time to WRAC on May 9, 2007. This draft did include the proposed molybdenum standard. But the information requested by WRAC was not provided as requested at the October 13, 2006 meeting.

EPA stated in the correspondence from Mr. Hakowski dated June 7, 2007 that build up of molybdenum in uric acid in the body can lead to gout. We have been unable to find support for this statement. The cause of gout is due to hyperuricemia, or excessive build up of uric acid in the blood. Under normal function, the kidneys break down and excrete uric acid that is deposited in the blood stream. But when this process is interfered with, or levels of uric acid in the blood exceed the kidneys' ability to process it, crystals can form in the blood stream which can deposit in joints, causing arthritic gout. The causes of hyperuricemia vary from diets deficient of vegetables and fiber, excessive weight, excessive alcohol use, certain medications, crash dieting, or excessive lactic acid build up in the body. These causes are independent of molybdenum intake levels.

The Chamber also questions whether Pennsylvania is unique from other states in having a medical history of chronic gout epidemics which require a molybdenum water quality

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standard. The documentation to date certainly does not reflect such a situation. We are unaware of any evidence that would justify establishing a molybdenum human health criteria in Pennsylvania based on gout occurrences in the Commonwealth.

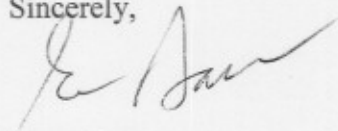
Independent of the complete lack of justification for a proposed molybdenum standard as previously addressed, DEP is proposing a limit that can't possibly be met through Best Available Technology. DEP is proposing a limit that will result in a situation where Pennsylvania industries and municipal treatment plants are exceeding an unattainable standard.

The Chamber is requesting that the molybdenum standard be withdrawn from the proposed triennial water quality standards pending a full evaluation of (1) the need for a standard based on objective research using sound science and an appropriate evaluation of relevant literature; and (2) the attainability and practical impacts of the proposed standard.

The Chamber is also providing comment on other specific sections within the proposed rulemaking:

1. Section 93.7(a), definition of "Critical Use" – The addition of the sentence, "Other intervening, more sensitive uses may apply at a given location in a waterbody" to the existing definition is of concern due to the uncontained and open-ended possibilities of "more sensitive uses." Dischargers should not be subject to such uncertainty due to the inevitable variability of interpretation between DEP regional offices, as well as inability to plan and budget company operations under such undefined conditions. In addition, the term "location" is undefined, and will again result in inappropriate and varied interpretation, which will adversely impact the ability of industries to remain financially sound and continue operating in the Commonwealth.
2. Section 93.9(b) – In the added language "if a water quality standard is more stringent than those in this title," change the word "standard" to "criterion." This is to ensure the intention of using comparative numeric criteria is clearly understood and communicated, and not qualitative or narrative standards.

Sincerely,



Gene Barr

Vice President, Government and Public Affairs