TO: Interested Persons

FROM: Ginachi Amah, D.Env, P.E.
Senior Water Resources Control Engineer
Basin Planning Program

DATE: July 8, 2019

SUBJECT: NOTICE OF STAKEHOLDER WORKSHOP ON IMPLEMENTATION CONSIDERATIONS FOR THE APPLICATION OF EPA's *2007 AQUATIC LIFE FRESHWATER QUALITY CRITERIA FOR COPPER* IN THE LOS ANGELES REGION

This notice is to inform interested persons that the Los Angeles Regional Water Quality Control Board (Regional Water Board) will hold a stakeholder workshop on preliminary considerations for the application of EPA's 2007 Aquatic Life Freshwater Quality Criteria for Copper in the Los Angeles Region. These considerations are presented in a draft document available on the Regional Water Board website at:
https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/

An Informational Workshop will be held on:

Tuesday, July 23, 2019 at 10:00 a.m.
at the Junipero Serra Building
Carmel Room, 1st Floor
320 W. 4th Street
Los Angeles, California 90013

At the workshop, Regional Board Staff will present information contained in the Regional Water Board's draft document and solicit stakeholder input. You may contact Dr. Ginachi Amah at (213) 576-6685 or Ginachi.Amah@waterboards.ca.gov if you have any questions regarding this matter. Please bring the foregoing to the attention of any persons known to you who would be interested in this matter.

Background

The Los Angeles Regional Water Board's (Regional Water Board's) current water quality objectives for copper are based on EPA's 1984 hardness-based criteria which include acute (1-hr) and chronic (4-day) concentrations of dissolved copper to which aquatic life can be exposed without harmful effect. These criteria are expressed as a function of hardness which serves as a surrogate for a number of water quality characteristics that affect the toxicity of copper. Increasing hardness generally has the effect of decreasing the toxicity of copper.

In 2007, based on new data on the toxicity of copper to aquatic organisms in fresh and salt waters, EPA revised its copper criteria from a hardness-based approach to a water-quality dependent approach that uses a predictive model – the Biotic Ligand Model (BLM). The BLM-derived criteria include those individual water quality parameters for which hardness served as a surrogate in the 1984 criteria. EPA believes that the revised criteria will provide improved guidance on the concentrations of copper that will be protective of aquatic life.

The 1984 hardness-based water quality criteria were included in EPA's promulgation of water quality criteria for priority pollutants in California in 2000 through the California Toxics Rule (CTR). The CTR metals criteria (and thus the Regional Water Board's objectives) include a water effect ratio (WER) to account for other site-specific water quality characteristics that affect the toxicity of metals to aquatic life. A WER generally has a default value of 1 unless a study is conducted to empirically derive a site-specific value. In the Los Angeles Region, there are a few instances where the copper water quality objectives have been modified by the application of Site-specific WER values.

While a number of states have adopted the revised criteria, in some fashion, as part of their water quality regulations, the State of California has not yet taken such action. However, in 2018, the Los Angeles Regional Water Board prioritized consideration of EPA's new and revised Clean Water Act Section 304(a) recommended criteria for adoption during the 2017-2019 triennial review period[1]. Considering the incorporation of EPA's 2007 copper criteria into the Los Angeles Region's Basin Plan is part of this effort.

To initiate the process, Regional Board staff has prepared a draft document discussing various implementation elements to be considered in the application of EPA's revised aquatic life copper criteria. The purpose of this workshop is to present and discuss these elements, and to solicit stakeholder input that may be incorporated into the final document which is intended to assist Regional Water Board staff and stakeholders in developing BLM-derived freshwater copper criteria in a consistent manner throughout the region.

[1] In October 2015, revisions to the federal Water Quality Standards (WQS) regulations at 40 C.F.R. Part 131 went into effect. The final rule addressed certain key WQS program areas including triennial reviews pursuant to CWA section 303(c)(1). Per the final rule, during their next triennial review, states and authorized tribes are to consider, for adoption as WQS, new or updated CWA section 304(a) water quality criteria recommendations published by the U.S. EPA since May 30, 2000.